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DEPARTMENT OF THE ARMY FIELD MANUAL

HANDBOOK ON AGGRESSOR MILITARY FORCES

HEADQUARTERS, DEPARTMENT OF THE ARMY
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HANDBOOK ON AGGRESSOR MILITARY FORCES

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PART ONE
ORGANIZATION
CHAPTER 1
THE AGGRESSOR ARMED FORCES

Section I. INTRODUCTION

1. Purpose

This manual is a guide to the organization and tactics to be employed by Aggressor in tactical exercises.

2. Scope

a. This manual includes Aggressor military system, organization of units, doctrine and tactics of offense, defense, and special operations as they pertain to Aggressor Ground Forces. It also includes a brief description of the weapons and logistical system used by Aggressor.

b. The forces described herein, with materiel ascribed to them, are fictitious. Any resemblance to existing forces is coincidental.

c. The material presented herein is applicable to both atomic and nonatomic warfare unless otherwise indicated.

Section II. ARMED FORCES ORGANIZATION

3. General

a. The government of Aggressor is totalitarian in form. Control is highly centralized in a triumvirate, known as the "Trinity." The Trinity has absolute control of the Circle Trigon Party and the Aggressor nation. The Circle Trigon Party has a firm grip over the Aggressor Armed Forces.

b. The totalitarian form of government of Aggressor is a potential vulnerability. Psychological warfare, under favorable circumstances, may be able to discredit and undermine the leadership of the Circle Trigon Party and thus reduce its control over the Aggressor Armed Forces. Dissension within the Trinity is another possible vulnerability which may be exploited to cause disunity within the Circle Trigon Party and the Aggressor nation.

4. The Armed Forces

a. The Armed Forces of Aggressor consist of the Army, Navy, Air Force, and Security Forces. These forces, except for the Security Forces, are controlled by the Ministry of the Armed Forces. Through the General Staff, directorates, and field forces headquarters, the Ministry of the Armed Forces carries out the nation's military policy. The Security Forces are the military element of the Ministry of Internal Affairs. These elite forces, composed of border troops, internal security troops, and certain signal units, are not used for normal military tasks, but provide the force necessary to insure the internal stability of the Aggressor Homeland.

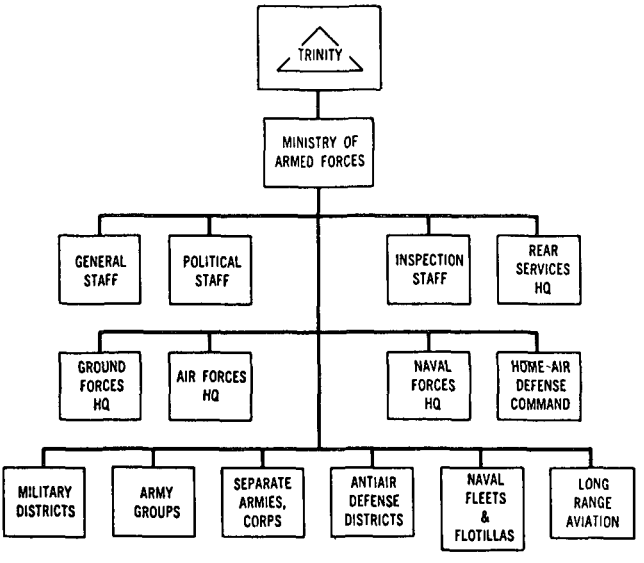


Figure 1. Aggressor high command.

b. The Aggressor Army, for tactical operations, is organized into army groups. Two or more army groups may be organized into a regional command to control operations in a particular area. Army groups, unless part of a regional command, are controlled by the Ministry of Armed Forces.

c. The Aggressor Navy is composed of fleets, flotillas, an air arm, and a marine force organized into naval rifle units. This marine force is trained to conduct small-scale assault landings and to provide the first wave for large-scale assault landings by Army forces. The Navy has a considerable number of modern ships, including aircraft carriers, and submarines. Specially equipped aggressor submarines can launch missiles while submerged. Sub-

marine launched missiles have the same general capabilities as the MICKY, MASHA, and MORRIS missiles (par. 374).

d. The Aggressor Air Forces are organized into tactical air armies, a long-range air force, a troop carrier command, and fighter units of the Home Air Defense Command. One or more tactical air armies are assigned to each army group. Aggressor stresses the use of airpower in support of ground forces.

e. The training of all components is extremely thorough and rigorous. A high standard of discipline is maintained; morale and *esprit de corps* are excellent. All troops are thoroughly indoctrinated in the principles of the Circle Trigon Party.

5. Ministry of the Armed Forces

a. The Ministry of the Armed Forces is headed by the Minister of Armed Forces. The Minister and his Deputies deal for the most part with the Chief of the General Staff, the Chief of the Political Staff, and the Chief of the Inspection Staff. Although the Minister transmits his decisions and orders principally through the Chief of the General Staff, he does have a direct channel of command to a number of staff headquarters and field commands in the homeland and abroad.

b. Most of the remaining business of the Ministry of the Armed Forces is administered by five officers—the Commander in Chief of the Ground Forces, the Commander in Chief of the Air Forces, the Commander in Chief of the Naval Forces, the Commander of the Home Air Defense, and the Commander in Chief of Rear Services. Each of these officers has a headquarters and a sizable staff. Although all are designated as commanders, the nature of their responsibilities makes them, in fact, staff officers rather than commanders.

6. General Staff

The General Staff assists the Minister of the Armed Forces by promulgating and supervising the execution of operational and joint training policies of all the Armed Forces. The General Staff assigns units of all services to joint task forces and selects commanders and staffs for such forces. It prepares strategic war plans and, in time of war, supervises their execution.

7. Political Staff

a. A vital element in the Circle Trigon Party's control of the military forces is the Political Staff. The Political Staff is a separate staff entity at the Ministry of the Armed Forces level and has counterparts throughout the Armed Forces. Within the Armed Forces all units down to include battalion size units have

political staffs. The political officer of the unit is the unit assistant commander for political affairs.

b. The Political Staff is responsible for the political indoctrination and surveillance of troops. To accomplish this mission, a network of informants and unit representatives is maintained in all units down to company size. The unit political officer is also responsible for the unit welfare, morale, orientation, and unit publication.

c. Although Aggressor adheres generally to the principle of unity of command, the political officer has access to confidential channels not available to the Commander. In a controversy with his commander, it is possible for a junior political officer to be upheld by higher authority. This system may, at times, seriously disrupt unity of command and reduce the effectiveness of units.

8. Inspection Staff

The Aggressor Inspection Staff determines the status of training and combat preparedness of units and individuals. It is not concerned with matters pertaining to morale, grievances, and fiscal matters.

9. Rear Services Headquarters

a. The Rear Services Headquarters has operating, staff, and coordinating responsibilities. It is responsible for the design, procurement, storage, issue, and maintenance of all general supplies including petroleum, oil, and lubricants, rations, and general purpose vehicles. It also controls the medical, finance, transportation, military justice, and replacement services for all services.

b. At Ministry of Armed Forces level, the Rear Services Headquarters is directly responsible to the Minister of the Armed Forces and not to the Ground Forces Headquarters. At ministry level it prepares the logistical and administrative elements of all plans and programs developed by the the Armed Forces General Staff. In tactical units there is a rear services staff that performs the same general functions and, in addition, controls the unit rear area. Every unit of regimental size or larger has an assistant commander for rear services who commands the rear services of the unit.

10. Ground Forces Headquarters

The Ground Forces Headquarters develops basic tactical doctrine for the Army and prescribes its application in training. It coordinates the school system of the Army. It insures that the arms and services subordinate to it (rifle, tank and mechanized, engineer, signal, and chemical troops) develop their specialized training in consonance with a unified policy.

11. Air Forces Headquarters

The Air Forces Headquarters responsibilities are comparable to those of the Ground Forces Headquarters. Long-range Aviation and the Home Air Defense Command are under the operational control of the Ministry of Armed Forces and not the Air Forces Headquarters.

12. Naval Forces Headquarters

Naval Forces Headquarters is responsible for various administrative technical, research and development, and procurement functions. Naval fleets and flotillas are under the operational control of the Ministry of Armed Forces and not of the Naval Forces Headquarters.

Section III. TERRITORIAL ORGANIZATION AND MOBILIZATION

13. Theater of Operations

Aggressor does not divide the theater of operations into a combat zone and a communications zone. As the army groups advance, their former service areas may be organized into a zone of military administration or zone of occupied territory. Occupied territory in rear of the army groups is administered by a military structure controlled by the Rear Services Headquarters of the Ministry of the Armed Forces.

14. Zone of Interior

The Aggressor homeland is divided into military districts. Military district commanders are responsible to the Minister of the Armed Forces for the training of all military units within their districts, except for specified stations and units. The district commander is also responsible for conscription and mobilization within his district. In the event of an attack upon the Homeland, commanders of military districts in the combat area become tactical commanders and direct the defense of their districts.

15. Mobilization

In the event of war, mobilization is accomplished by the military districts in two main phases. The first phase involves the assembling of trained reserves to bring existing field units of all types to war table of organization strength and the mobilization of new units in accordance with a 30-day mobilization plan. The second phase involves the inducting, assembling and training of men who, for the most part, are without previous military service. Both phases of the mobilization program are preplanned.

CHAPTER 2
THE AGGRESSOR GROUND FORCES

Section I. GENERAL

16. Combat Arms

a. Aggressor ground combat arms include rifle (the basic arm), artillery (including missiles), tank, airborne, engineer, signal and chemical troops. All these arms with their headquarters are subordinate to the Ground Force Headquarters. Rifle troops do not have a separate headquarters but are directly subordinate to the Aggressor Ground Forces Headquarters. See chapters 9 and 11 for use of artillery.

b. Doctrine for rifle units is developed directly by the Ground Forces Headquarters. The headquarters of the other combat arms are responsible for the development of specialized doctrine and the conduct of specialized training, research and development programs, and supervision of procurement, storage, issue, and maintenance of specialized equipment and supplies applicable to their arm.

17. Administrative Services

Aggressor maintains administrative services comparable to the United States Army Judge Advocate General Corps, Finance Corps, Corps of Military Police, and Inspector General. All these services except for the Aggressor Inspection Staff are part of the Rear Services Organization.

18. Technical Service Troops

The Aggressor technical service troops, listed below, are all part of the rear services.

a. Intendance. Intendance troops have functions comparable to the US Army Quartermaster Corps.

b. Military Construction Troops. These troops include various specialized engineer units and do all major construction in rear areas.

c. Technical Troops of the Rear Services. These troops and specialists perform maintenance on general purpose vehicles and other comparable tasks. At division level and lower, these troops also perform some of the repair and maintenance of combat ve-

hicles which at higher echelons are normally performed by technical troops of the combat arms.

d. Medical and Finance. These troops perform generally the same functions as those in the US Army.

19. Principles of Tactical Organization

a. Aggressor divisions are the largest units with tables of organization and equipment (TOE). The corps, armies, and army group organizations are flexible and capable of forming many subordinate organizations into well-balanced teams to meet requirements.

b. Most ground force regimental units are of a standard type. For example, the medium tank regiments of the mechanized rifle and tank divisions are the same. The antiaircraft regiment found in all divisions is identical.

20. Staff Organization

a. The typical Aggressor headquarters, division and higher, consists of command, artillery staff, operations staff, political staff, and rear services staff groups. The commander is usually the senior combat arms officer in the unit. He is assisted by a deputy commander. The unit chief of staff is an assistant commander. The operations staff works directly for the chief of staff and not the commander. This staff prepares plans and supervises their coordination and execution.

b. In a division staff, which is similar to corps and army staffs, the principal staff element is the operations group which is directly subordinate to the chief of staff. This group contains subgroups performing duties similar to US G1, G2, G3, and signal functions. A separate staff group is headed by the assistant divi-

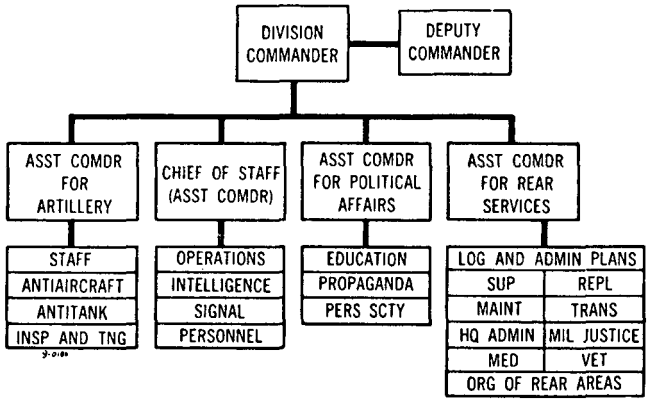


Figure 2. Division staff organization.

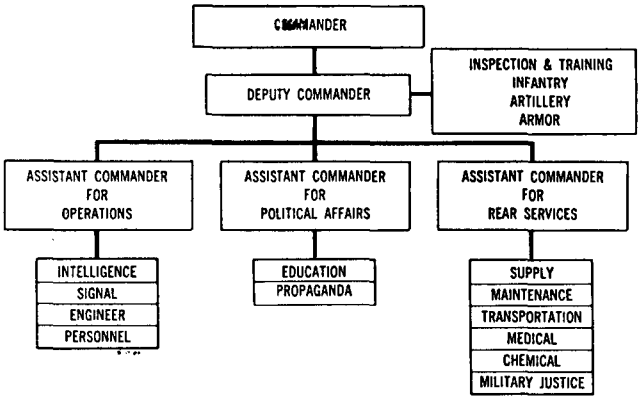


Figure 3. Regimental and battalion staff organization.

sion commander for artillery. This group supervises the division artillery. The major functions of the political and rear services staffs have been discussed in paragraphs 7 and 9.

21. Army Group

The highest ground tactical echelon is the army group (fig. 4, table I). An army group normally consists of 3 rifle armies, a mechanized army, an air army, 3 artillery corps, 2 artillery missile regiments, and 2 antiaircraft artillery missile regiments, and the necessary administrative and combat support troops. The army group has both administrative and tactical functions. It operates supply installations for all types of military supply.

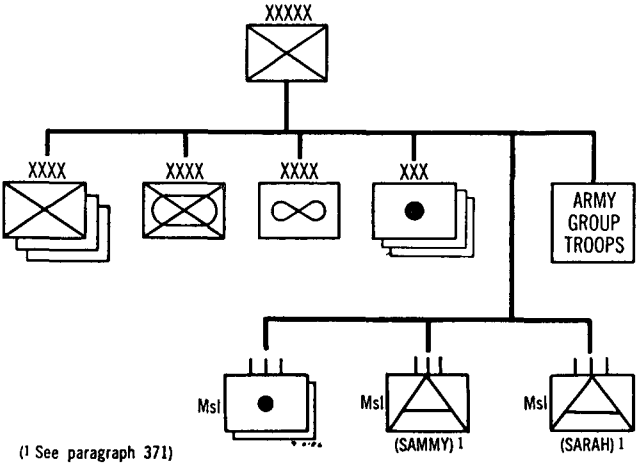


Figure 4. Typical army group.

22. General Headquarters Troops

General Headquarters (GHQ) troops which may be attached to major tactical units include artillery, mountain, and airborne divisions and corps; tank and mechanized rifle divisions; and other separate artillery, rifle, mechanized rifle, tank, engineer, chemical, signal, transportation, ordnance, medical, and psychological warfare units.

23. The Rifle Army

The rifle army is organized for assault rather than exploitation. It normally consists of 3 rifle corps, 1 artillery division, 1 antitank artillery brigade, 1 antiaircraft artillery division (table XXVIII, ch. 15, sec. III), and the necessary service troops (fig. 5, table II).

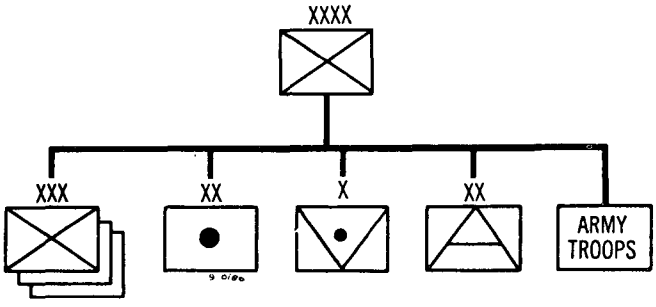


Figure 5. Typical rifle army.

Additional artillery, air support, and special troops such as engineers and separate tank and mechanized rifle units are often attached for specific operations. Artillery corps may be attached, but airborne and mountain corps and the mechanized army normally operate directly under the army group commander. The rifle army has both tactical and administrative functions. It operates supply installations for all types of military supply.

24. The Mechanized Army

The mechanized army, organized for exploitation, normally consists of 2 mechanized divisions, 2 tank divisions, an antiaircraft artillery division, an artillery brigade, 1 antitank artillery brigade, a reconnaissance regiment, and other service and combat support units (fig. 6, table III). The antiaircraft artillery division is the same as the antiaircraft artillery division of the artillery corps except the SAMMY battalion is replaced by a SALLY regiment (fig. 41). The artillery brigade consists of a regiment of 150-mm howitzers, a regiment of 120-mm guns, and 250-mm

rocket artillery regiment. The organization of the regiments of the artillery brigade is the same as shown in figure 34. The reconnaissance regiment consists of a headquarters and service unit and two reconnaissance battalions organized the same as the reconnaissance battalion of the rifle division (par. 38).

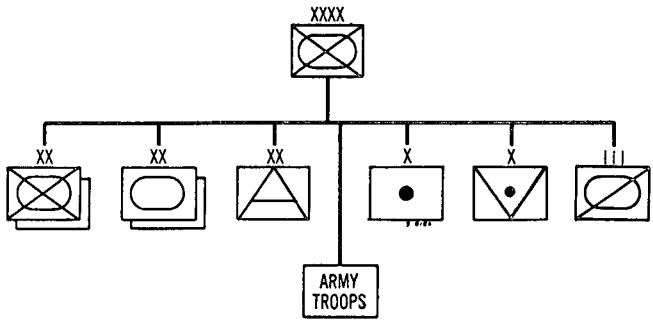


Figure 6. Typical mechanized army.

25. Types of Corps

The Aggressor corps consists of a corps headquarters, normal attached service units, and tactical troops. When operating as part of a field army, the corps has limited administrative and supply functions. The types of army corps in the Aggressor army are rifle, airborne, artillery, and mountain corps.

26. Rifle Corps

Each rifle corps normally consists of two rifle divisions, a mechanized rifle division, an artillery brigade, an antiaircraft artillery missile battalion (SALLY) (fig. 41), a separate heavy tank regiment, and the necessary service units (fig. 7, table IV). The artillery brigade is identical with the artillery brigade of the mechanized army (par. 24) except that the rocket regiment has three battalions.

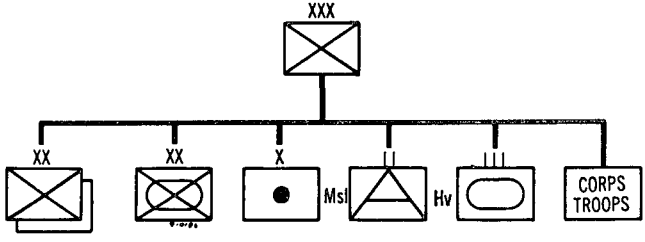


Figure 7. Typical rifle corps.

27. Airborne Corps

The airborne corps consists of 2 or 3 airborne divisions, service units, and the necessary air transport units.

28. Artillery Corps

The artillery corps, which is an administrative headquarters, usually consists of 1 howitzer division, 1 gun division, 2 antiaircraft artillery divisions, 2 antitank artillery brigades, 1 missile brigade, and necessary corps troops (fig. 8, table V). Varying numbers of separate artillery and rocket units and additional antiaircraft artillery units may be attached to this corps.

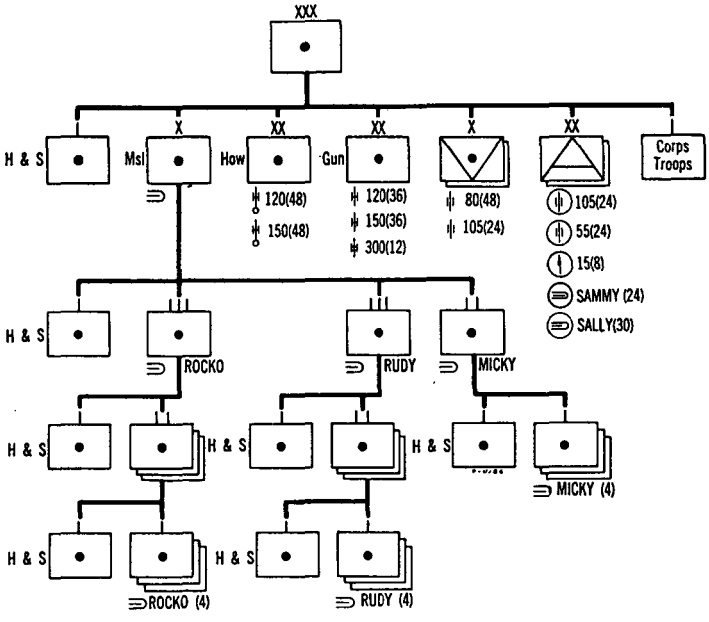


Figure 8. Typical artillery corps.

Table I. Typical Army Group Principal Weapons

Unit	Mortars				Artillery													AA								AT					Armored vehicles							
	81-mm	120-mm	150-mm	220-mm	80-mm gun	120-mm how	120-mm gun	150-mm how	150-mm gun	205-mm gun-how	150-mm rocket	250-mm rocket	300-mm gun	ROCKO, msl.	RUDY, msl.	MICKY, msl.	MASHA, msl.	MORRIS, msl.	15-mm mg (dual & quad)	40-mm gun	55-mm gun	80-mm gun	105-mm gun	SALLY, msl.	SAMMY, msl.	SARAH, msl.	80-mm recoilless rifle	105-mm recoilless rifle	55-mm gun	80-mm gun	105-mm gun	Amphibious tanks	Medium tank	Heavy tank	Tank retriever	Armored carrier (AC 1, 2, or 3)	80-mm SP gun	105-mm SP gun	120-mm SP gun
Rifle army (3)	972	486	252	108	324	1080	270	234		72	162	396							3588	432	1044	324	72	360	72		1296	486	1134	828	120	315	3393	810		9036	540	396	684
Mech army		48	48	36	48	192	24	24			48	24							292		240	48	24	120					144	96	40	110	1222	184	90	1492			176
Artillery																																						
Corps (3)						144	108	144	108				36	108	108	36			48		144		144	180	144					288	144								
Artillery																																						
Missile																																						
Regt (2)																	24	24																				
Antiaircraft																																						
Artillery																																						
Missile																																						
Regt (SAMMY)																									72													
Antiaircraft																																						
Artillery																																						
Missile																																						
Regt (SARAH)																										54													
Total	972	534	300	144	372	1416	402	402	108	72	210	420	36	108	108	36	24	24	3928	432	1428	372	240	660	288	54	1296	486	1278	1212	304	425	4615	994	90	10528	540	396	860

Table II. Typical Rifle Army Principal Weapons

Unit	Mortars				Artillery							AA							AT					Armored vehicles						
	81-mm	120-mm	150-mm	220-mm	80-mm	120-mm how	120-mm gun	150-mm how	205-mm gun-how	150-mm rocket	250-mm rocket	15-mm mg	40-mm gun	55-mm gun	80-mm gun	105-mm gun	SALLY, msl	SAMMY, msl	80-mm recoilless rifle	105-mm recoilless rifle	55-mm gun	80-mm gun	105-mm gun	Amphibious tank	Medium tank	Heavy tank	Armored carriers (AC 1, 2 or 3)	80-mm SP guns	105-mm SP guns	120-mm SP guns
Rifle Corps (3)	324	162	84		108	360	72	54		54	108	1188	144	324	108		90		432	162	378	180		105	1131	270	3012	180	132	228
Artillery Div				36			18	24	24		24																			
AT brigade																						96	40							
AA Div												8		24		24	30	24												
Total rifle army	324	162	84	36	108	360	90	78	24	54	132	1196	144	348	108	24	120	24	432	162	378	276	40	105	1131	270	3012	180	132	228

Table III. Typical Mechanized Army Principal Weapons

Unit	Mortars			Artillery						AA						AT				Armored vehicles					
	120-mm	150-mm	220-mm	80-mm gun	120-mm how	120-mm gun	150-mm how	150-mm rocket	250-mm rocket	15-mm mg (dual)	15-mm mg (quad)	55-mm gun	80-mm gun	105-mm gun	SALLY, msl	105-mm recoilless rifle	55-mm gun	80-mm gun	105-mm gun	120-mm SP gun	Amphibious tank	Medium tank	Heavy tank	Tank retriever	Armored carrier (AC 1, 2, or 3)
Mech rifle div (2)	36	24		24	96			36		150	40	108	24			36	108			110	50	446	92	38	852
Tank div (2)	12	24		24	96			12		66	16	108	24							66	50	754	92	50	596
AA div											8	24		24	120	12	36								
Artillery brigade			36			24	24		24																
AT brigade																		96	40						
Recon Regt										12											10	22		2	48
Total	48	48	36	48	192	24	24	48	24	228	64	240	48	24	120	48	144	96	40	176	110	1222	184	90	1496

Table IV. Typical Rifle Corps Principal Weapons

Unit	Mortars			Artillery						Antiaircraft						AT				Armored vehicles						
	81-mm	120-mm	150-mm	80-mm gun	120-mm how	120-mm gun	150-mm how	150-mm rocket	250-mm rocket	15-mm mg (dual)	15-mm mg (quad)	40-mm gun	55-mm gun	80-mm gun	SALLY, msl	80-mm recoilless rifle	105-mm recoilless rifle	55-mm gun	80-mm gun	Amphibious tank	Medium tank	Heavy tank	Armored carrier (AC 1, 2 or 3)	80-mm SP gun	105-mm SP gun	120-mm SP gun
Rifle division (2)	108	36	16	24	72					166	40	48	48	24		108	36	72	60	10	154		500	42	44	
Mech Rifle division		18	12	12	48			18		150	40		54	12		36	18	54		25	223	46	426	18		22
Arty brigade						24	18		36																	
Hvy tank regt													6									44	10			21
AA bn															30											
Total	108	54	28	36	120	24	18	18	36	316	80	48	108	36	30	144	54	126	60	35	377	90	936	60	44	43

Table V. Typical Artillery Corps, Principal Weapons

Unit	Artillery								AT		AA				
	120-mm gun	150-mm gun	300-mm gun	120-mm how	150-mm how	ROCKO, msl	RUDY, msl	MICKY, msl	80-mm gun	105-mm gun	15-mm mg	55-mm gun	105-mm gun	SALLY, msl	SAMMY, msl
Msl brigade						36	36	12							
How div				48	48										
Gun div	36	36	12												
AT brigade (2)									96	48					
AA division (2)											16	48	48	60	48
Total	36	36	12	48	48	36	36	12	96	48	16	48	48	60	48

29. Mountain Corps

The mountain corps is essentially a rifle corps with lighter support and service elements. It has a high proportion of horse transport and a low proportion of armor. Mountain corps are organized only as needed.

30. Types of Divisions

Types of ground divisions are rifle, airborne, mountain, tank, mechanized rifle, field artillery and antiaircraft artillery. Mountain divisions are organized only as needed.

Section II. THE RIFLE DIVISION

31. Rifle Division

a. The rifle division is the basic unit of Aggressor tactical operations and is motorized except for the rifle components (fig. 9, table VI). Additional artillery units are normally attached for operations.

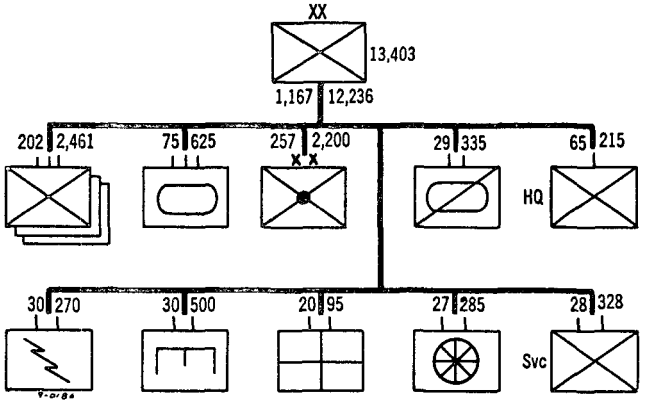


Figure 9. Rifle division.

b. The units of the rifle division are—

(1) *Three rifle regiments* (par. 32).

(2) *Medium tank and self-propelled gun regiment* (par. 34).

(3) *Division artillery* (par. 36).

(4) *Reconnaissance battalion* (par. 38).

(5) *Headquarters company,* consisting of a headquarters and a headquarters company which includes a chemical platoon, and an air section with 3 light aircraft. The company also has three 80-mm SP guns.

(6) *Signal battalion.* This battalion consists of a headquarters and service company, a wire company, and a radio company.

(7) *Engineer battalion.* This battalion consists of a headquarters and service company, a bridge company, and a combat engineer company.

(8) *Medical battalion.*

(9) *Transportation battalion.* This battalion includes a headquarters and service company and three truck companies each with a company headquarters and two truck platoons with thirty 3-ton trucks and trailers each.

(10) *Service battalion.* Includes a headquarters company, an ordnance company, an intendance company, and a military police company.

32. Rifle Regiment, Rifle Division

(fig. 10)

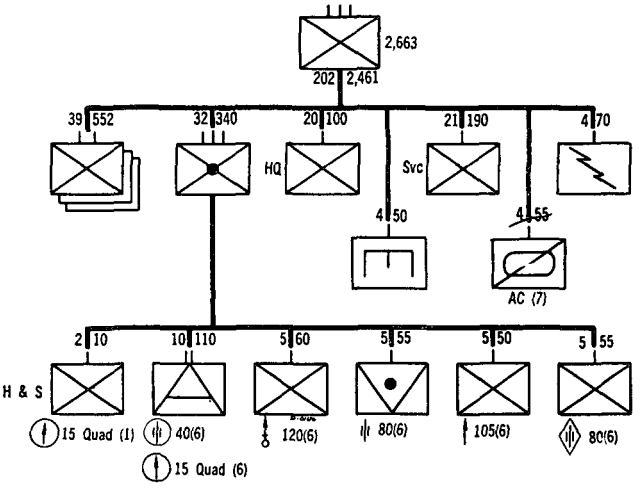


Figure 10. Rifle regiment, rifle division

The units of the rifle regiment are—

a. Three Rifle Battalions (par. 33).

b. Regimental Artillery (par. 34).

c. Headquarters Company. This company contains the command elements of the regiment. The company also has a chemical squad.

d. Service Company. This company contains the service elements of the regiment.

e. Signal Company. This company consists of a headquarters section, a radio section, and wire and maintenance sections.

f. Engineer Company. This company consists of a headquarters section and mine detector and demolition platoons.

g. Reconnaissance Company. This company consists of a headquarters section and two reconnaissance platoons.

33. Rifle Battalion—Rifle Regiment

The units of the rifle battalion (fig. 11, table XI, ch. 15, sec. III) are—

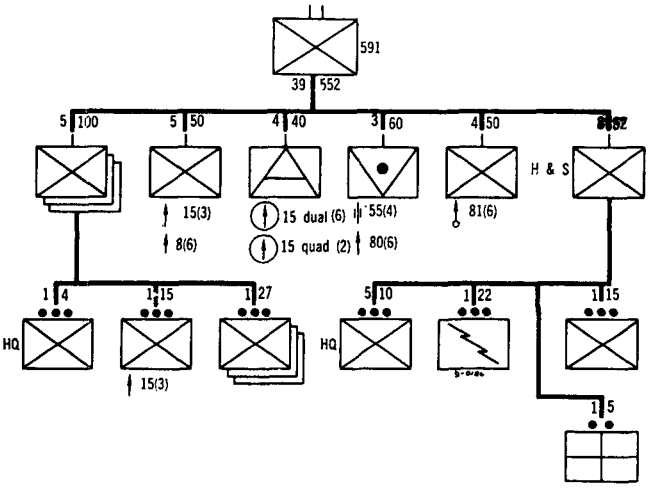


Figure 11. Rifle battalion, rifle regiment, rifle division.

a. Three Rifle Companies. The rifle company has a headquarters platoon, a machinegun platoon, and three rifle platoons. Each rifle platoon has three rifle squads and a headquarters section. In each rifle squad there are 9 men, 1 light machinegun, 1 submachinegun, and 7 rifles.

b. Machinegun Company. This company consists of a headquarters platoon and three machinegun platoons. Each machinegun platoon contains 2 light machineguns and 1 heavy machinegun.

c. Antiaircraft Artillery Company. This company has a headquarters platoon and 2 antiaircraft artillery platoons each equipped with 3 twin and 1 quadruple mount 15-mm antiaircraft machineguns.

d. Antitank Company. This company contains a headquarters platoon, a 55-mm antitank gun platoon, and one 80-mm recoilless rifle platoon. The gun platoon has four 55-mm towed anti-

tank guns, and the recoilless rifle platoon has six 80-mm recoilless rifles.

e. Mortar Company. This company has a headquarters platoon and three 81-mm mortar platoons. Each mortar platoon has two 81-mm mortars.

f. Headquarters and Service Company. This company contains command, communications, and service sections.

34. Regimental Artillery

The units in the regimental artillery (fig. 10, table X, ch. 15, sec. III) are—

a. Headquarters and Service Company. This company contains the command and service sections.

b. Antiaircraft Artillery Battalion. This battalion consists of a headquarters and service battery, containing the command and service sections and 2 firing batteries of 2 platoons each. One platoon in each battery contains three 40-mm antiaircraft guns, towed, and the other contains three quadruple mount 15-mm machineguns.

c. Mortar Company. This company consists of a headquarters and service platoon and two mortar platoons with three 120-mm mortars each.

d. Antitank Company. This company consists of a headquarters and service platoon and two platoons with three 80-mm towed antitank guns each.

e. Recoilless Rifle Company. This company contains a headquarters and service platoon and two platoons with three 105-mm recoilless rifles each.

f. Self-Propelled Gun Company. This company contains a headquarters and service platoon and two platoons equipped with three 80-mm self-propelled guns each.

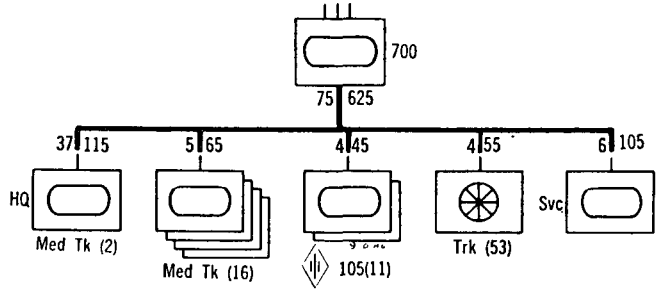


Figure 12. Medium tank and self-propelled gun regiment, rifle division.

35. Medium Tank and Self-Propelled Gun Regiment

The units of the medium tank and self-propelled gun regiment (fig. 12, table XII, ch. 15, sec. III) are—

a. Headquarters Company. This company contains the command, communications and engineer sections, and a reconnaissance platoon. There are two tanks in the company.

b. Medium Tank Companies. There are four medium tank companies (105-mm gun) in the regiment. Each company consists of a headquarters platoon with 1 tank and 3 tank platoons with 5 tanks each.

c. Self-Propelled Gun Companies. There are two self-propelled gun companies in the regiment. Each company contains a headquarters platoon with one 105-mm self-propelled gun and two platoons with five 105-mm self-propelled guns each.

d. Transportation Company. This company consists of a headquarters platoon with 3 trucks and 2 platoons with 25 trucks each.

e. Service Company. This company contains the maintenance and service sections for the regiment. There are three tank retrievers in the company.

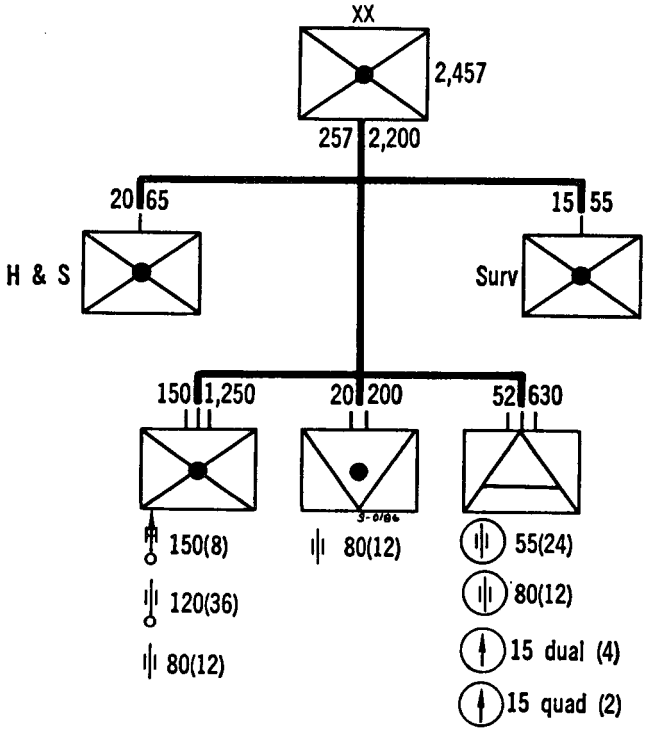


Figure 13. Division artillery, rifle division.

36. Division Artillery, Rifle Division

Units of the division artillery, rifle division (fig. 13, and table XIII, ch. 15, sec. III) are—

a. Headquarters and Service Battery. This battery consists of an operations platoon; a communications platoon with wire and radio sections; and headquarters maintenance and transportation sections.

b. Artillery Survey Battery. This battery consists of a headquarters platoon and survey, sound-ranging, flash-ranging, and communications platoons. The battery prepares initial survey data for fire adjustment and also assists in locating the sources of enemy artillery fires by sound and flash-ranging methods.

c. Antiaircraft Artillery Regiment. This regiment is common to the rifle, tank, and mechanized divisions. Units are a headquarters and service unit; two 80-mm antiaircraft artillery gun batteries each with a headquarters section, a fire direction section and two firing sections; and four antiaircraft automatic weapons batteries each with a headquarters section, a fire direction section and two firing sections (fig. 14, table XIV, ch. 15, sec. III).

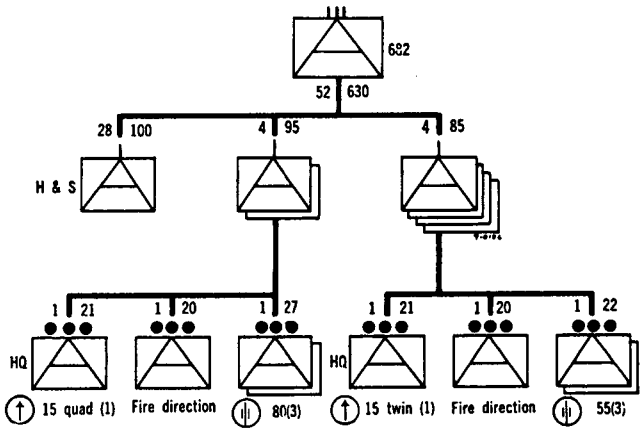


Figure 14. Antiaircraft artillery regiment, rifle, mechanized and tank divisions.

d. Artillery Regiment, Rifle Division. This regiment consists of a headquarters and service battery; three 120-mm howitzer battalions each with a headquarters and service battery and three firing batteries; one 80-mm gun battalion, with a headquarters and service battery and three firing batteries; and one 150-mm mortar battalion with a headquarters and service battery and three firing batteries (fig. 15, table XV, ch. 15, sec. III).

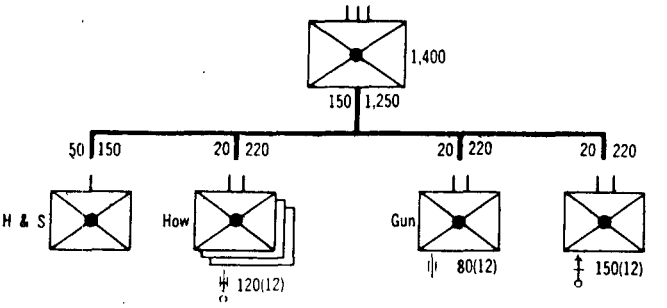


Figure 15. Artillery regiment, rifle division.

e. Antitank Artillery Battalion. This battalion consists of a headquarters battery containing command and communications sections; 3 firing batteries, each with a headquarters platoon and 2 firing platoons with 80-mm towed antitank guns; and a service battery with service, medical, and maintenance sections (fig. 16, and table XVI, ch. 15, sec. III).

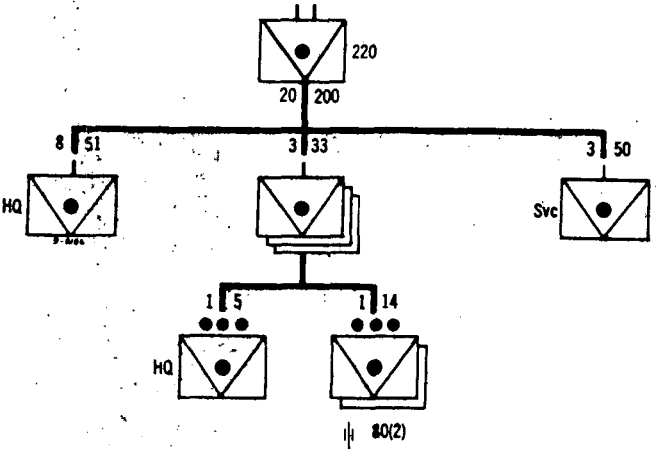


Figure 16. Antitank artillery battalion, rifle division.

(1) *Headquarters battery.* This battery consists of the battalion headquarters and the headquarters platoon.

(2) *80-mm gun battery.* There are three 80-mm gun batteries in the battalion. Each battery contains a headquarters section and 2 firing platoons with 2 guns each.

37. Transportation Battalion, Rifle Division

This unit consists of a headquarters company, a service company, and 3 truck companies. Each truck company has sixty 3-ton trucks, each with a 1-ton trailer.

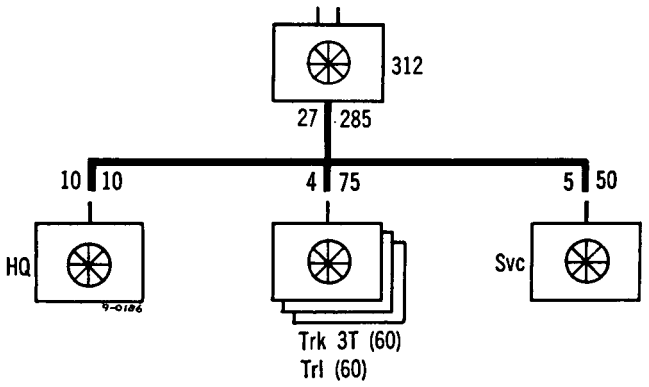


Figure 17. Transportation battalion, rifle division.

38. Reconnaissance Battalion

Aggressor reconnaissance battalions are the same in rifle, mechanized rifle and tank divisions. The battalion is completely motorized. Units of the battalion (fig. 18 and table XVII, ch. 15, sec. III) are—

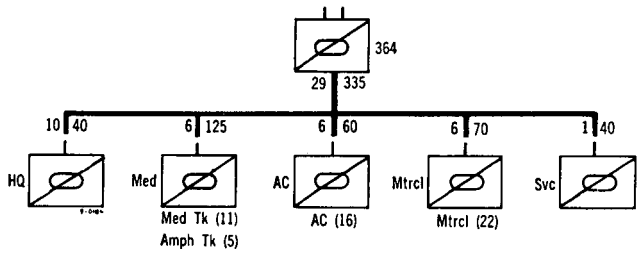


Figure 18. Reconnaissance battalion, rifle, mechanized rifle and tank divisions.

a. Headquarters Company. This company contains the command and communications sections of the battalion.

b. Tank Company. This company contains a headquarters section with 1 medium tank, 2 tank platoons with 5 medium tanks each, and 1 amphibious tank platoon with 5 amphibious tanks.

c. Armored Carrier Company. This company consists of a headquarters section with 1 armored carrier and 3 platoons with 5 armored carriers each.

d. Motorcycle Company. This company contains a headquarters section with 1 armored carrier and 3 motorcycle platoons with 7 motorcycles each.

e. Service Company. This company contains a headquarters section and the necessary supply, maintenance, and service sections of the battalion.

Section III. THE MECHANIZED RIFLE DIVISION

39. Mechanized Rifle Division

The mechanized rifle division is a completely motorized and well-balanced tank infantry-artillery team, with sufficient firepower and shock action to render it capable of executing its principal role of assault and exploiting breakthroughs. It is the most versatile of the three basic Aggressor divisions. The principal units of the mechanized rifle division (fig. 19 and table VII) are—

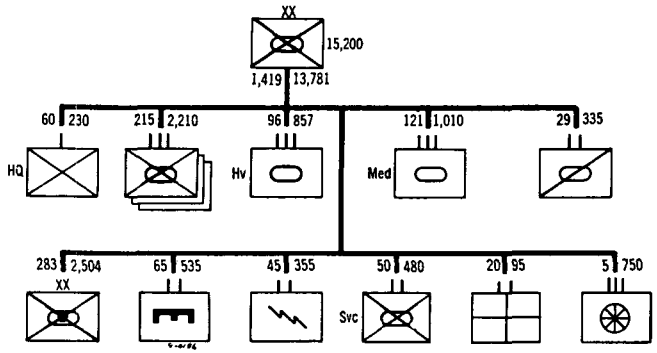


Figure 19. Mechanized rifle division.

a. Division Headquarters Company. The division headquarters company consists of the division headquarters, a headquarters platoon, a security platoon, and an air section with 3 light aircraft.

b. Three Mechanized Rifle Regiments (par. 40).

c. Heavy Tank and Self-Propelled Gun Regiment (par. 42).

d. Medium Tank Regiment (par. 43).

e. Reconnaissance Battalion (par. 38).

f. Division Artillery (par. 44).

g. Engineer Battalion. This battalion has a headquarters and service company, a bridge company, and two combat engineer companies.

h. Signal Battalion (par. 31*b*(6)). This battalion differs from the rifle division signal battalion in the number of personnel and vehicles required for mobility.

i. Service Battalion.

j. Medical Battalion. (par. 31*b*(8)).

k. Transportation Regiment. This regiment consists of a regimental headquarters and service company and two truck battalions each containing a headquarters and service company and three truck companies each with a company headquarters and two truck platoons with thirty 3-ton trucks and trailers each.

40. Mechanized Rifle Regiment
(fig. 20)

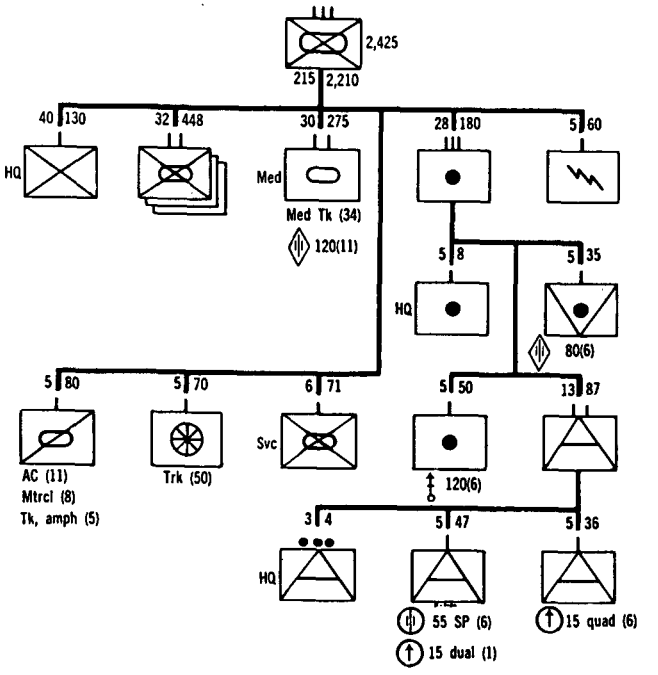


Figure 20. Mechanized rifle regiment, mechanized rifle division.

The principal units of the mechanized rifle regiment are—

a. Headquarters Company. The company has a chemical squad.

b. Three Mechanized Rifle Battalions (par. 41).

c. Medium Tank Battalion. This battalion consists of a headquarters and service company, two medium tank companies, and a self-propelled gun company. Each tank company has 3 tank platoons with 5 medium tanks in each platoon and 1 medium tank in the company headquarters. The battalion headquarters has two medium tanks. The self-propelled gun company has two platoons with five 120-mm self-propelled guns in each platoon and one in company headquarters.

d. Regimental Artillery. Regimental artillery consists of a headquarters battery, a SPAT battery with six 80-mm guns, a mortar battery with six 120-mm mortars, and an antiaircraft artillery battalion consisting of a headquarters platoon, one battery of six 55-mm guns and one 15-mm dual machinegun and another battery of six 15-mm (quad) machineguns.

e. The Signal Company. This company provides the communications facilities for the regiment.

f. The Reconnaissance Company. This company contains 2 armored carrier platoons and 1 amphibious tank platoon. The company operates under control of the intelligence officer.

g. The Transportation Company. This company provides vehicles to motorize the regiment.

h. Service Company. This company contains the service, supply, and maintenance sections.

41. Mechanized Rifle Battalion, Mechanized Rifle Regiment (fig. 21)

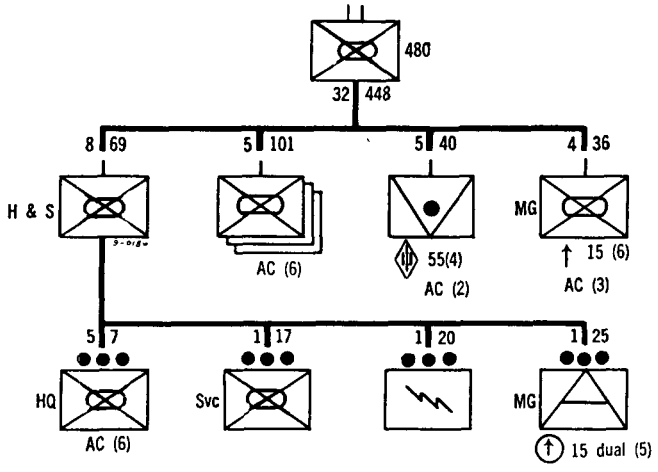


Figure 21. Mechanized rifle battalion, mechanized rifle regiment.

The principal units of the mechanized rifle battalion are—

a. Headquarters and Service Company. This company contains the command and service sections (signal, medical, and antiaircraft).

b. Three Mechanized Rifle Companies. The company consists of a company headquarters and three mechanized rifle platoons. Each mechanized rifle platoon has three 8-man squads. Each squad has 1 light machinegun, 1 recoilless antitank launcher, 1 rifle, and 5 submachineguns.

c. Antitank Company. This company consists of 2 gun platoons of 2 gun squads each. Each platoon has two 55-mm guns, two 80-mm recoilless rifles and one 105-mm recoilless rifle.

d. Machinegun Company. This company consists of 2 platoons of 3 squads each. Each squad has a heavy machinegun.

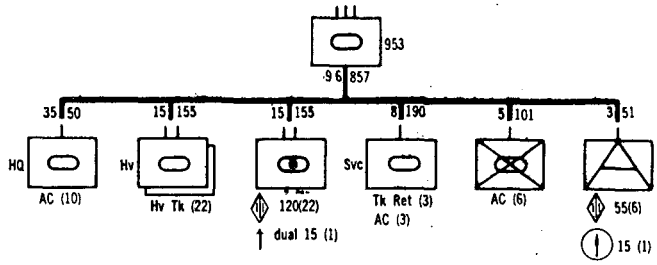


Figure 22. Heavy tank and self-propelled gun regiment, mechanized rifle and tank divisions.

42. Heavy Tank and Self-Propelled Gun Regiment, Mechanized Rifle and Tank Divisions (fig. 22)

The principal units of the heavy tank and self-propelled gun regiment are—

a. Headquarters Company.

b. Two Heavy Tank Battalions. Each battalion consists of a headquarters and service company and two heavy tank companies. Each heavy tank company has 2 heavy tank platoons, each equipped with 5 tanks. The battalion headquarters and service company has two heavy tanks.

c. One Self-Propelled Gun Battalion. This battalion is the same as the heavy tank battalion with the substitution of the 120-mm self-propelled gun for the heavy tank.

d. Mechanized Rifle Company (par. 41*b*).

e. Antiaircraft Artillery Battery. This battery has two firing platoons with three 55-mm self-propelled twin mount antiaircraft guns each.

f. Service Company.

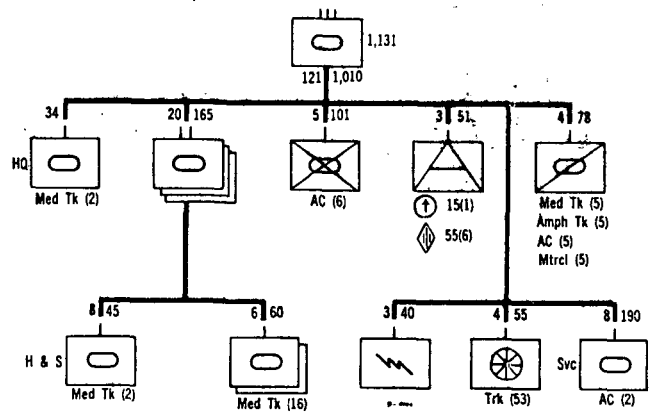


Figure 23. Medium tank regiment, mechanized rifle and tank divisions.

43. Medium Tank Regiment, Mechanized Rifle and Tank Divisions (fig. 23)

The principal units of the medium tank regiment are—

a. Headquarters Company.

b. Three Medium Tank Battalions. Each battalion consists of a headquarters and service company and two medium tank companies. Each tank company has 3 platoons with 5 medium tanks in each platoon and 1 medium tank in the company headquarters. Battalion headquarters has two medium tanks (fig. 24 and table XXII, ch. 15, sec. III).

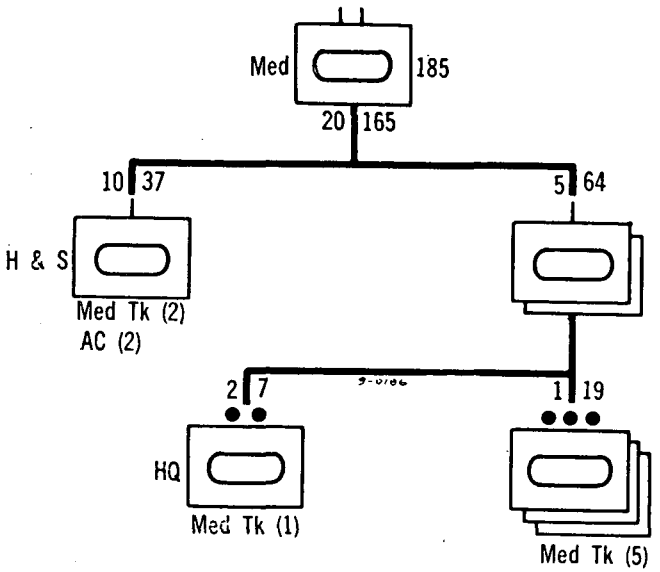


Figure 24. Medium tank battalion, tank regiment, mechanized rifle and tank divisions.

c. Mechanized Rifle Company (par. 41*b*).

d. Antiaircraft Artillery Battery (par. 42*e*).

e. Reconnaissance Company. This company contains a company headquarters and 3 platoons, 1 with 5 medium tanks, 1 with 5 armored carriers, and 1 with 5 amphibious tanks.

f. Signal Company.

g. Transportation Company.

h. Service Company.

44. Division Artillery, Tank and Mechanized Rifle Divisions (figs. 25 and 29)

The units of the division artillery, tank and mechanized rifle divisions are—

a. Division Artillery Headquarters and Service Battery. This battery has a command section, a fire direction platoon, a recon-

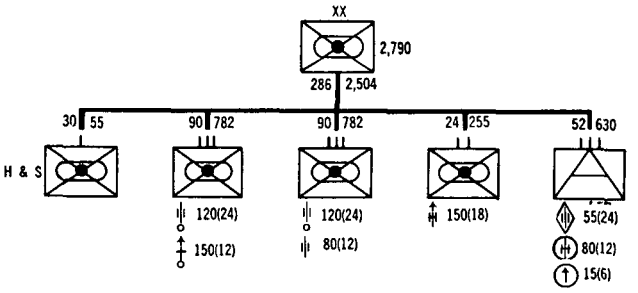
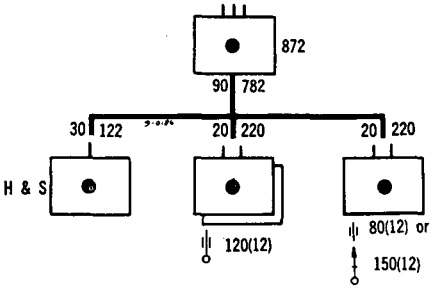


Figure 25. Division artillery, mechanized rifle division.

naissance platoon, a wire platoon, a radio platoon, and battery headquarters personnel.

b. Two Artillery Regiments, Tank and Mechanized Rifle Divisions (fig. 26 and table XXIV, ch. 15, sec. III).



NOTE: There are two artillery regiments in each tank or mechanized division. One regiment has one battalion of 80-mm guns, and no 150-mm mortars, the other regiment has one battalion of 150-mm mortars and no 80-mm gun battalion.

Figure 26. Artillery regiment, tank and mechanized rifle division.

The headquarters and service battery of each regiment contains the command reconnaissance, fire direction, survey, supply, and maintenance sections. There are two 120-mm howitzer battalions in each regiment, and either an 80-mm gun battalion or 150-mm mortar battalion. All battalions have a battalion headquarters battery with a reconnaissance squad, a signal platoon, and three firing batteries. Each firing battery has a command section and 2 firing platoons each with 2 artillery pieces.

c. Rocket Launcher Battalion, Mechanized Rifle Division. The units of the rocket launcher battalion, mechanized rifle division (fig. 27 and table XXV, ch. 15, sec. III) are—

(1) *Headquarters and service battery.*

(2) *Three rocket launcher batteries.* Each rocket launcher can fire sixteen 150-mm nonnuclear rockets.

d. Antiaircraft Artillery Regiment (par. 36c).

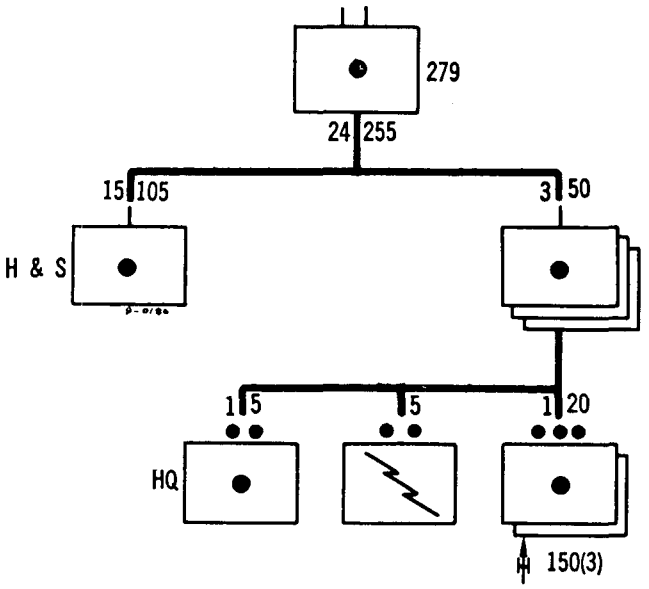


Figure 27. Rocket launcher battalion, mechanized rifle division.

Section IV. THE TANK DIVISION

45. Tank Division

The tank division is primarily a tank unit without the balance found in the mechanized rifle division. It is completely motorized and capable of great shock action, but not well suited for sustained operations or defense in position (fig. 28 and table VIII).

a. Headquarters Company (par. 39*a*).

b. Three Medium Tank Regiments (par. 43).

c. Heavy Tank and Self-Propelled Gun Regiment (par. 42).

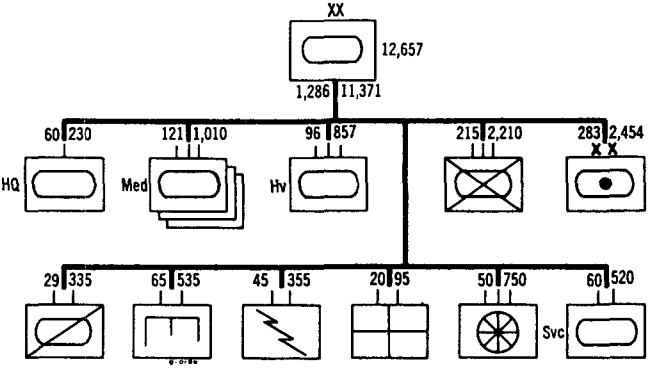


Figure 28. Tank division.

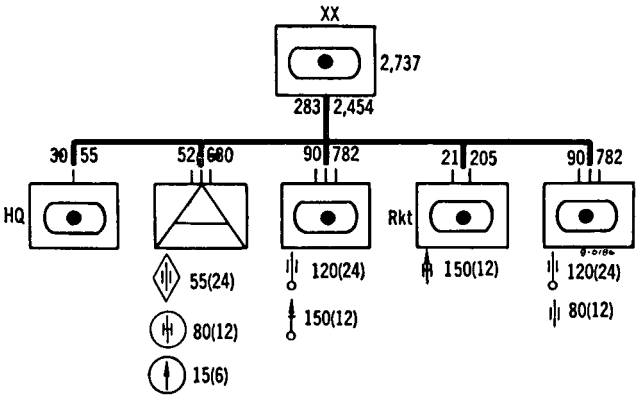


Figure 29. Division artillery, tank division.

d. Mechanized Rifle Regiment (par. 40).

e. Division Artillery (par. 44*a*, *b*, and *d* and fig. 29).

f. Rocket Launcher Battalion. This unit is identical with the one in the mechanized division (par. 44*c*) except it has only 2 firing batteries instead of 3 (fig. 30 and table XXVI, ch. 15, sec. III).

g. Reconnaissance Battalion (par. 38).

h. Engineer Battalion (par. 39*g*.)

i. Signal Battalion (par. 39*h*).

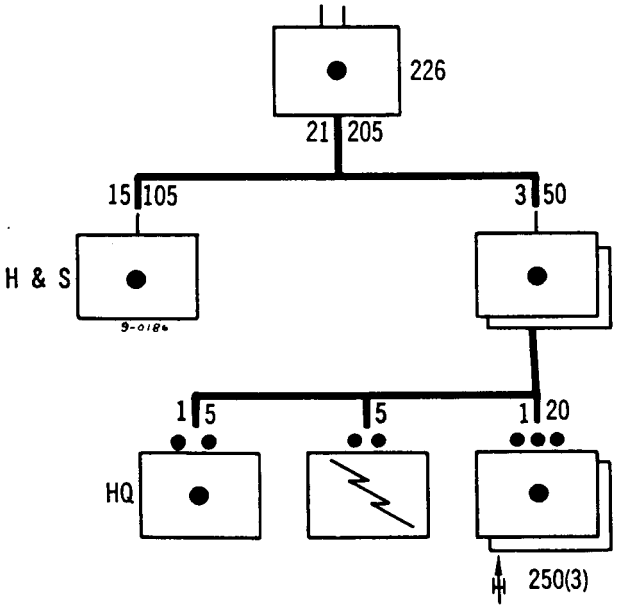


Figure 30. Rocket launcher battalion, tank division.

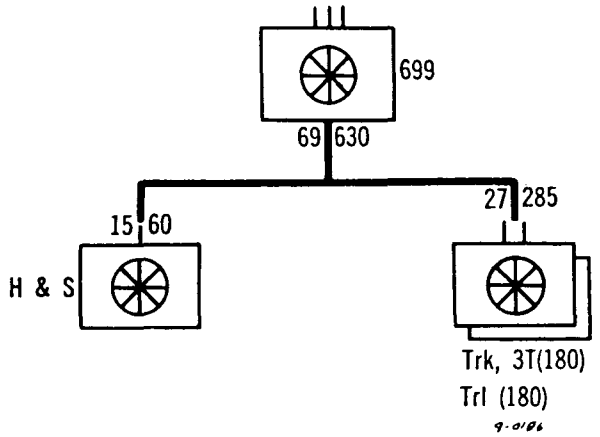


Figure 31. Transportation regiment, mechanized rifle and tank divisions.

j. Medical Battalion (par. 31*b* (8)).

k. Transportation Regiment (par. 39*k* and fig. 31).

l. Service Battalion.

Section V. THE AIRBORNE DIVISION

46. General

a. Aggressor airborne divisions have the same basic type units found in the rifle division. The airborne division is motorized except for its rifle components. Two or more airborne divisions plus supporting forces may be organized as an airborne corps.

b. Units of the airborne division (fig. 32 and table IX) are—

(1) *Airborne headquarters company.* This unit contains a division headquarters section, a rear echelon section and the necessary company service elements.

(2) *1 airborne parachute regiment.* This regiment consists of a headquarters and service unit and four parachute rifle battalions. These battalions are similar to the rifle battalion found in the rifle regiment of the rifle divison.

(3) *2 airborne mixed regiments.* This regiment consists of a headquarters and service unit, 1 glider battalion, and 2 parachute battalions. The glider battalion has the same organization as the parachute battalion and may be moved by helicopter rather than gliders.

(4) *Airborne reconnaissance company.* This company is the same as the motorcycle company of the reconnaissance battalion, rifle division (par. 38*d*).

(5) *Airborne signal battalion.* The signal battalion is the

Table VI. Rifle Division Principal Weapons and Transportation

Unit	Small arms					Mortars			Arty		AA					AT					Armored vehicles						Vehicles		Acft
	Rifles	Pistols	SMG	LMG	HMG	81-mm	120-mm	150-mm	80-mm gun	120-mm how	15-mm mg (dual)	15-mm mg (quad)	40-mm gun	55-mm gun	80-mm gun	80-mm launcher (squad)	80-mm recoilless rifle	105-mm recoilless rifle	55-mm gun	80-mm gun	Amphibious tank	Medium tank	Tank retriever	Armored carrier, (AC 1, 2 or 3)	80-mm SP gun	105-mm SP gun	Motorcycle	Truck	Obsn acft (PEEPER)
Rifle Regiment (3)	5874	1071	1044	318	111	54	18				75	18	18			243	54	18	36	18				198	18		9	510	
Med Tank & Sp Gun Regt	301	150	249	2							1											66	3	7		22	5	85	
Division Artillery	1848	392	181	36							4	2		24	12					12							4	360	
Arty Regt	(1096)	(250)	(24)	(30)				8	12	36																		(220)	
AT Arty Bn	(161)	(20)	(33)	(6)																(12)								(33)	
AAA Regt	(531)	(52)	(99)								(4)	(2)		(24)	(12)												(2)	(97)	
Survey Btry	(30)	(30)	(10)																									(5)	
Recon Bn	186	29	143	21	21						3										5	11	1	24			25	18	
Others	1340	140	455																					21	3		48	377	3
Total	9549	1782	2072	377	132	54	18	8	12	36	83	20	18	24	12	243	54	18	36	30	5	77	4	250	21	22	91	1350	3

Table VII. Mechanized Rifle Division Principal Weapons and Transportation

Unit	Small arms					Mortars		Artillery			AA				AT					Armored vehicles							Vehicles		Acft
	Rifles	Pistols	SMG	LMG	HMG	120-mm	150-mm	80-mm gun	120-mm how	150-mm rocket	15-mm mg (dual)	15-mm mg (quad)	55-mm gun	80-mm gun	80-mm launcher (squad)	55-mm SP gun	80-mm SP gun	80-mm recoilless rifle	105-mm recoilless rifle	Tank, amphibious	Tank, medium	Tank, heavy	Tank retriever	Armored carrier (AC1)	Armored carrier (AC2)	120-mm SP gun	Motorcycles	Trucks	Obsn acft (PEEPER)
Mech Rifle Regt (3)	3324	1275	2676	342	54	18					66	18	18		243	54	18	36	18	15	102		9	30	285	33	45	465	
Hvy Tank & SP Gun Regt	509	97	339	12							1		6		9							46	3	6	13	22	20	115	
Medium Tank Regt	540	113	435	9							1		6		9					5	109		3	13	10		10	103	
Division Artillery	2095	463	196	36			12	12	48	18	4	2	24	12														452	
Artillery Regt	(682)	(154)	(18)	(18)			(12)		(24)																			(145)	
Artillery Regt	(682)	(154)	(18)	(18)				(12)	(24)																			(145)	
AAA Regt	(531)	(52)	(99)								(4)	(2)	(24)	(12)														(97)	
Rocket Bn	(170)	(48)	(61)							(18)																		(60)	
Recon Bn	186	29	143	21	21						3				15					5	11		1	24			25	18	
Others	2057	265	605																		1		3	35	10		35	874	3
Total	8711	2242	4394	420	75	18	12	12	48	18	75	20	54	12	276	54	18	36	18	25	223	46	19	108	318	55	135	2027	3

Table VIII. Tank Division Principal Weapons and Equipment

	Small arms					Mortars		Arty			AA				AT					Armored vehicles							Vehicles		Acft
	Rifles	Pistols	SMG	LMG	HMG	120-mm	150-mm	80-mm gun	120-mm how	150-mm rocket	15-mm mg (dual)	15-mm mg (quad)	55-mm gun (twin)	80-mm gun	80-mm launcher (squad)	55-mm SP gun	80-mm SP gun	80-mm recoilless rifle	105-mm recoilless rifle	Amphibious tank	Medium tank	Heavy tank	Tank retriever	Armored carrier (AC 1)	Armored carrier (AC 2)	120-mm SP gun	Motorcycle	Truck	Obsn acft (PEEPER)
Med Tank Regt (3)	1647	341	1305	27							3		18		27					15	327		9	39	30		30	309	
Mech Rifle Regt	1108	425	892	114	18	6					22	6	6		81	12	6	12	6	5	34		3	10	95	11	15	155	
Hvy Tank and Sp Gun Regt	506	96	339	12							1		6		9							46	3	6	13	22	20	115	
Division Artillery	2029	442	230	36			12	12	48	12	4	2	24	12													4	447	
Arty Regt	(682)	(154)	(18)	(18)				(12)	(24)																			(145)	
Arty Regt	(682)	(154)	(18)	(18)			(12)		(24)																			(145)	
AAA Regt	(531)	(52)	(99)								(4)	(2)	(24)	(12)													(2)	(97)	
Rocket Bn	(104)	(42)	(80)							(12)																		(56)	
Recon Bn	186	29	143	21	21						3				15					5	11		1	24			25	18	
Others	2551	298	655												39						5		9	34	10		53	976	3
Total	8027	1631	3564	210	39	6	12	12	48	12	33	8	54	12	171	12	6	12	6	25	377	46	25	113	148	33	147	2020	3

Table IX. Airborne Division Principal Weapons and Transportation

Unit	Small arms					Mort	AA			AT			Arty	Trans	
	Rifles	Pistols	SMG	LMG	HMG	81-mm	15-mm mg (dual)	15-mm mg (quad)	55-mm gun	80-mm launcher (squad)	80-mm recoilless rifle	80-mm gun	80-mm gun	Motorcycle	Trucks
Mixed Regt (2)	3058	628	480	198	72	36	36			162	36				204
Parachute Regt	1962	392	320	132	48	24	24			108	24				136
Div Arty	878	190	90	24			6	12	6			12	36		160
Gun Bn (3)	(588)	(114)	(18)	(18)									(36)		(90)
AA Bn	(86)	(25)	(39)				(6)	(12)	(6)						(32)
AT Bn	(161)	(26)	(33)	(6)								(12)			(33)
Recon Co	44	6	26	21	1									22	1
Others	979	366	313											10	250
Total	6921	1582	1229	375	121	60	66	12	6	270	60	12	36	32	751

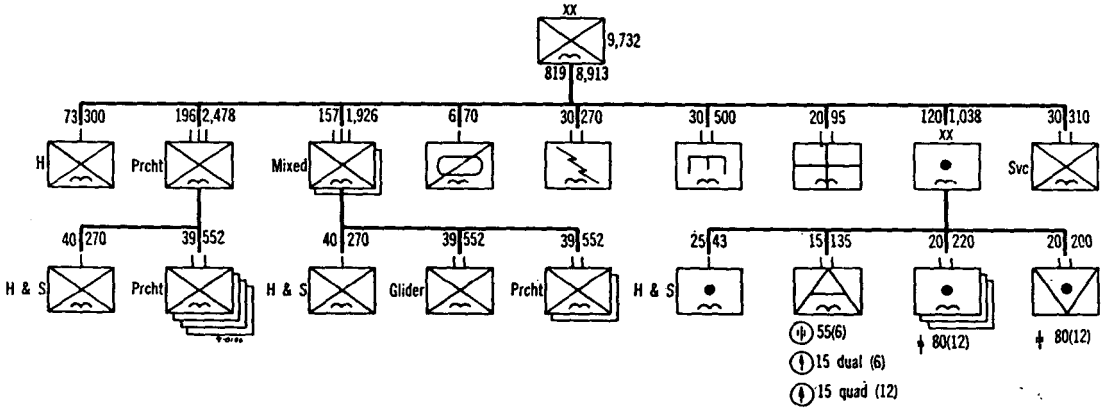


Figure 32. Airborne division.

same as the signal battalion of the rifle division (par. 31*b*(6)).

(6) *Airborne engineer battalion.* The engineer battalion is the same as the engineer battalion of the rifle division (par. 31*b*(7)).

(7) *Airborne medical battalion.* The airborne medical battalion is the same as the medical battalion of the rifle division.

(8) *Airborne division artillery.* The component units of the airborne division artillery (fig. 32) are identical to the same units in the rifle division artillery except for the airborne antiaircraft artillery battalion. This battalion consists of a headquarters and service battery, 1 battery with six 55-mm guns and six 15-mm dual machineguns, and 1 battery with twelve 15-mm quadruple machineguns.

(9) *Airborne service battalion.* The airborne service battalion has a headquarters company, an intendance company, a transportation company, a finance section, and a postal section. The transportation company is the same as the truck company in the rifle division transportation battalion (fig. 17).

47. Airborne Rifle Battalion
(fig. 33)

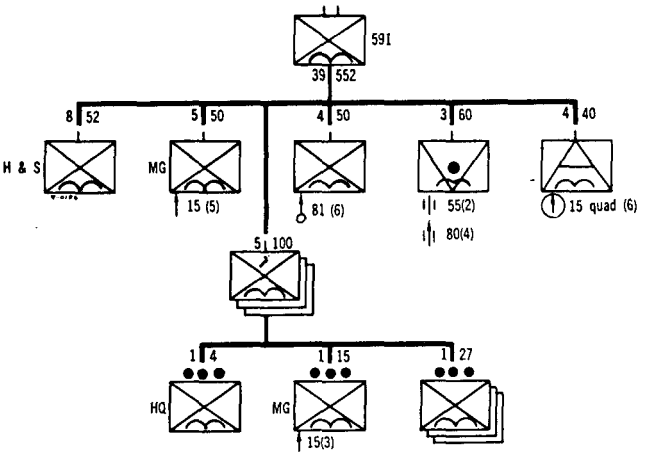


Figure 33. Airborne rifle battalion, paracute or glider.

The Aggressor airborne rifle battalion is organized along the same lines as the rifle battalion of the rifle regiment of the rifle division.

a. Headquarters and Service Company. The company consists of a command section and a service section and provides supply,

communications, maintenance, administration, and medical service for the battalion.

b. Machinegun Company (par. 33*b*).

c. Three Airborne Rifle Companies. Each company consists of a headquarters platooon, a heavy machinegun platoon with 3 heavy machineguns, and 3 rifle platoons (par. 33*a*).

d. Airborne Mortar Company (par. 33*e*).

e. Airborne Antitank Company (par. 33*d*).

f. Airborne Antiaircraft Company (par. 33*c*).

Section VI. THE ARTILLERY DIVISION

48. General

The artillery division is an administrative headquarters and not a tactical unit. It varies in composition, depending on the situation and available artillery units, and may control as many as six field artillery brigades.

49. Typical Artillery Units

a. Rifle Army Artillery Division (fig. 34). This unit consists of the following:

(1) *Headquarters and service unit.*

(2) *220-mm mortar regiment* (fig. 38, *e* below).

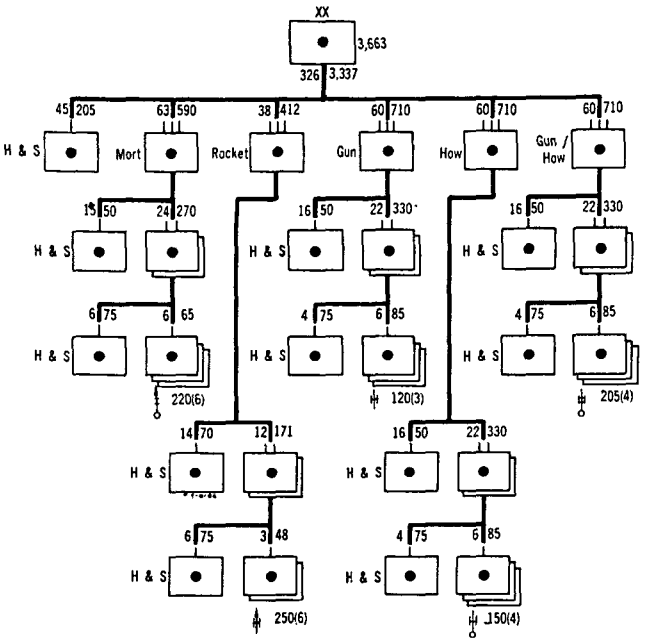


Figure 34. Rifle army artillery division.

(3) *250-mm rocket launcher regiment* (fig. 38, *e* below).

(4) *120-mm gun regiment* (fig. 35, *b* below).

(5) *150-mm howitzer regiment* (fig. 36, *c* below).

(6) *205-mm gun howitzer regiment.* This unit has the same organization as the 150-mm howitzer regiment described in (5) above.

b. Gun Division, Typical Artillery Corps. This division consists of a headquarters and service unit, a rocket regiment, and 2 gun brigades. One gun brigade is equipped with thirty-six 120-mm guns and the other brigade is equipped with thirty-six 150-mm guns. The rocket regiment is equipped with twelve 300-mm rocket launchers.

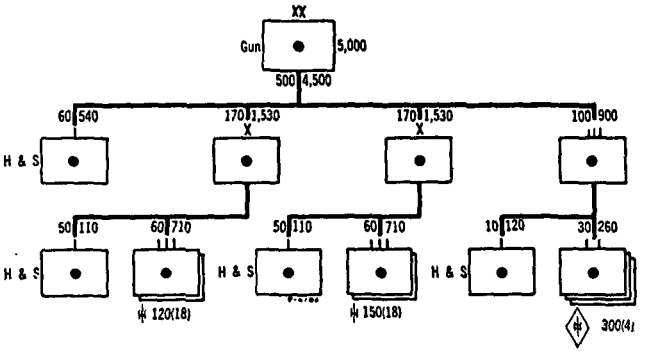


Figure 35. Gun division, artillery corps.

c. Howitzer Division, Typical Artillery Corps. This division consists of a headquarters and service unit and 2 howitzer brigades. One howitzer brigade is equipped with forty-eight 150-mm howitzers and the other brigade has forty-eight 120-mm howitzers.

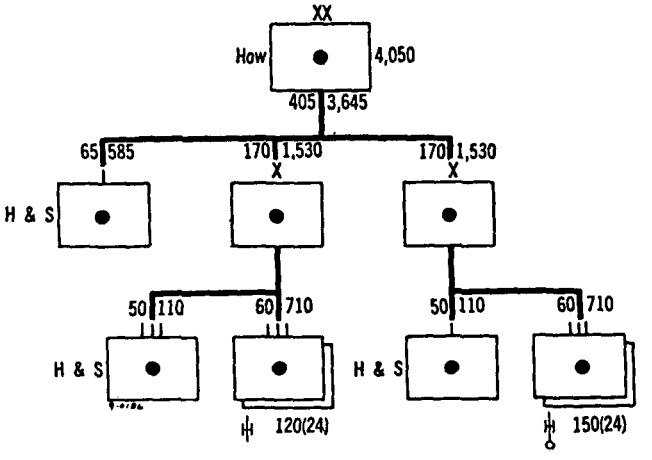


Figure 36. Howitzer division, artillery corps.

d. Antitank Artillery Brigade, Artillery Corps. This brigade consists of a headquarters and service unit and 3 antitank gun regiments. Two of these regiments are equipped with twenty-four 80-mm antitank guns, and the third regiment is equipped with twenty-four 105-mm antitank guns.

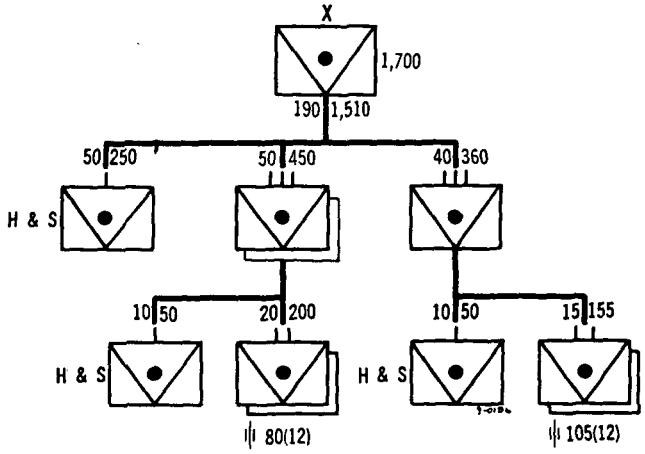
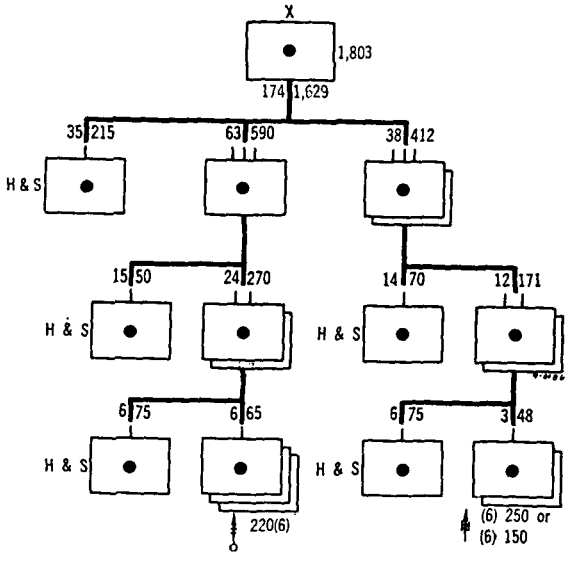


Figure 37. Antitank artillery brigade, artillery corps.

e. Heavy Mortar and Rocket Launcher Brigade. The heavy mortar and rocket launcher brigade consists of a headquarters and service unit, one 220-mm heavy mortar regiment, one 150-mm



NOTE: One regiment is armed with 250-mm rocket launchers and one regiment with 150-mm rocket launchers.

Figure 38. Heavy mortar and rocket launcher brigade.

rocket launcher regiment and one 250-mm rocket launcher regiment.

f. Missile Brigade (Mixed). The mixed missile brigade consists of a headquarters and service unit, 1 ROCKO missile regiment, 1 RUDY missile regiment, and 1 MICKY battalion.

(1) *ROCKO or RUDY missile regiment.* This regiment consists of a headquarters and service unit and 3 missile battalions.

(2) *MICKY missile battalion.* This battalion consists of a headquarters and service unit and 3 rocket missile batteries. Each battery has a headquarters and service platoon and 2 firing platoons of 2 MICKY rocket missiles each.

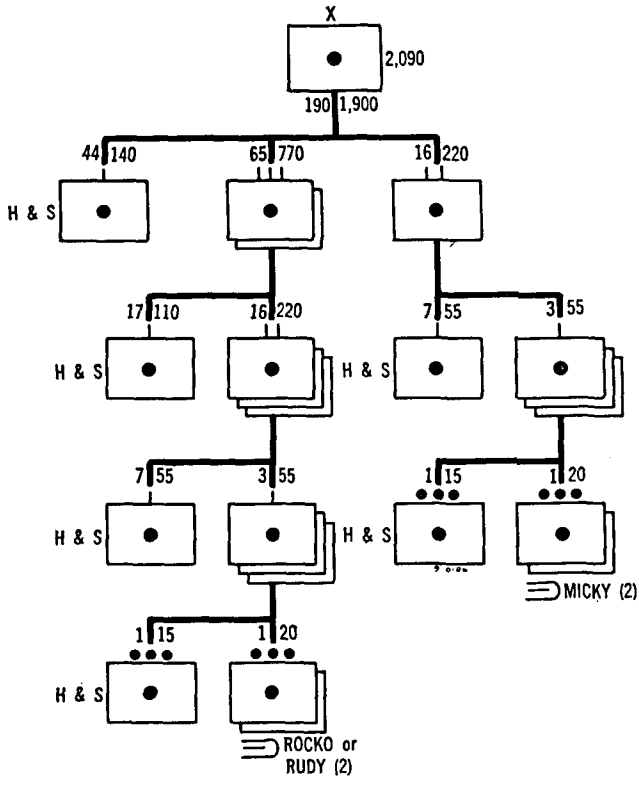


Figure 39. Missile brigade (mixed).

Section VII. THE ANTIAIRCRAFT ARTILLERY DIVISION

50. General

Like the artillery division, the antiaircraft artillery division is an administrative headquarters and does not function as a tac-

tical unit. The antiaircraft artillery division varies in composition depending on the situation and available antiaircraft artillery units. An antiaircraft artillery division may control as many as six antiaircraft artillery regiments.

51. Typical Antiaircraft Artillery Division

The principal units of an antiaircraft artillery division (fig. 40 and table XXVIII, ch. 15, sec. III) are—

a. Headquarters Battery.

b. 1 SAMMY Missile Battalion.

c. 1 SALLY Missile Battalion.

d. 1 Medium Antiaircraft Artillery Regiment.

e. 1 Automatic Weapons Antiaircraft Artillery Regiment.

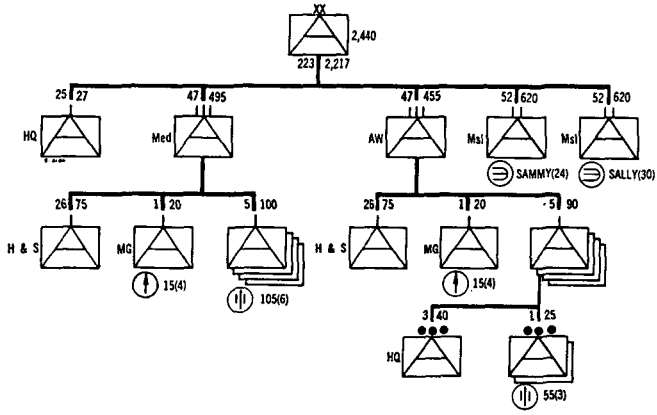


Figure 40. Typical antitaircraft artillery division, artillery corps.

Section VIII. GENERAL HEADQUARTERS TROOPS

52. General

GHQ troops are units held under control of the Aggressor High Command, for allotment to army groups, armies, and corps. GHQ troops can be suballotted temporarily to divisions or specialized task forces for specific operations. The more common GHQ units are described in this section.

53. Rifle Units

a. Rifle Regiment (Separate). This rifle regiment is the same as the rifle regiment in the rifle division (par. 32).

b. Mechanized Rifle Regiment (Separate). This regiment is the same as the mechanized rifle regiment in the mechanized rifle division (par. 40).

c. Airborne Rifle Battalion (Separate). This battalion is the same as the airborne rifle battalion in the airborne division (par. 47).

d. Ski Battalion (Separate—31 Officers and 627 Enlisted Men). The ski battalion consists of three ski companies, a weapons company, and a headquarters and service company. Transportation for the battalion consists of wide-track vehicles and powered sleds.

(1) *Three ski companies (5 officers and 118 enlisted men).* The ski company consists of a headquarters section, three ski platoons, and an 81-mm mortar section. Each ski platoon has 3 squads each with a light machinegun and 8 submachinegunners. The mortar section has two 81-mm mortars.

(2) *Weapons company (5 officers and 160 enlisted men).* The weapons company consists of heavy machinegun, antitank, mortar, and antiaircraft platoons, and a headquarters section. Its armament consists of six heavy machineguns, three 55-mm antitank guns, six 81-mm mortars, and three 40-mm antiaircraft guns.

(3) *Headquarters and service company (11 officers and 113 enlisted men).*

54. Armored Units

a. Medium Tank Regiment (Separate). This regiment is the same as the medium tank regiment of the mechanized rifle division (par. 43).

b. Heavy Tank Regiment (Separate). This regiment is the same as the heavy tank regiment of the mechanized rifle division (par. 42).

c. 105-mm Self-Propelled Gun Battalion and Regiment (Separate). The 105-mm self-propelled gun battalion is the same as the 105-mm gun battalion in the medium tank regiment, rifle division (par. 35). Separate 105-mm self-propelled gun regiments consist of three of these battalions and the necessary service troops.

d. 120-mm Self-Propelled Gun Battalion and Regiment (Separate). This battalion is the same as the 120-mm self-propelled gun battalion of the heavy tank regiment, mechanized division (par. 42). Separate 120-mm self-propelled regiments consist of three of these battalions and the necessary service troops.

55. Field Artillery Units

a. Aggressor has many separate field artillery units. The organization of these units corresponds to the field artillery battalions

and regiments of the artillery, rifle, and mechanized rifle divisions and brigades of artillery divisions and corps.

b. Other GHQ artillery units are separate artillery ballistic missiles battalions (nuclear). Aggressor ballistic missile battalions have the same organization as the MICKY battalion (fig. 39). Missile regiments equipped with either the MICKY, MASHA, MORRIS, or MOE missiles consist of a headquarters and service unit and two missile battalions. For characteristics, see paragraph 374.

56. Antiaircraft Artillery Units

a. Aggressor Artillery Units. Those for use with the rifle army correspond in organization to the antiaircraft artillery battalions and regiments of the antiaircraft and rifle division. For the defenses of key areas of the Homeland and for field use, Aggressor also employs surface-to-air missile units.

b. Antiaircraft Artillery Missile Regiment (SARAH, SAMMY, or SALLY). This regiment consists of headquarters and service units and 3 missile battalions. Each battalion consists of a headquarters and service battery and two firing batteries. Each firing battery consists of a headquarters and service platoon, a fire direction platoon, and one firing platoon. The SARAH regiment firing platoon has 3 launching sections with 3 launchers each. The SAMMY regiment firing platoon has 4 launching sections with 3 launchers each. The SALLY regiment firing platoon has 5 launching sections with 3 launchers each. For characteristics, see paragraph 371.

57. Antitank Artillery Units

Aggressor employs many GHQ antitank artillery units. The organization of these units corresponds to the antitank artillery units found in the rifle, mechanized rifle, tank divisions, armies, and artillery corps.

58. Engineer Units

a. Engineer Brigade Headquarters. This headquarters can control up to three engineer regiments.

b. Engineer Regiment Headquarters. This headquarters can control up to six engineer battalions of varying types.

c. Ponton Bridge Building Battalion (24 Officers and 296 Enlisted Men). The ponton bridge building battalion consists of a headquarters and service company, three bridge building companies, and an equipment transport company. It can build a 500-foot 50-ton ponton bridge in 3 hours.

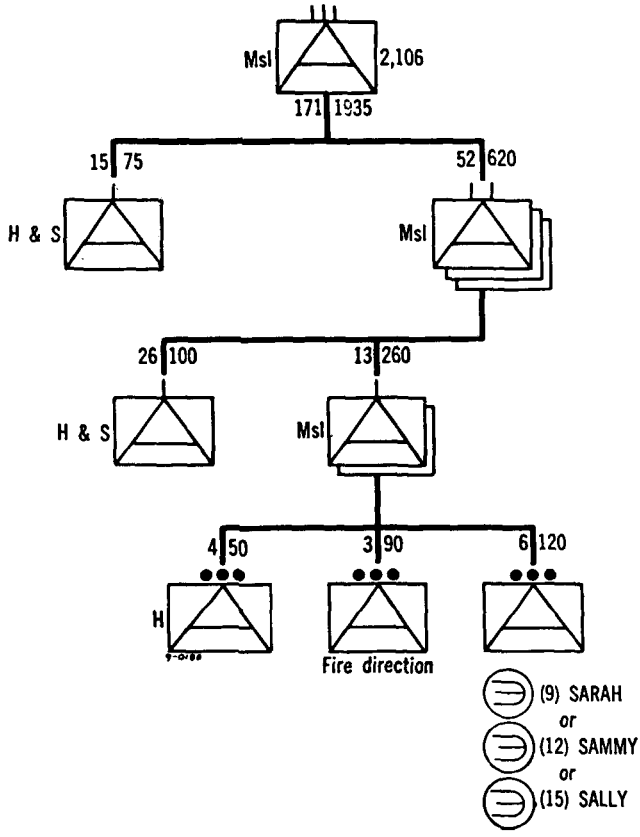


Figure 41. Antiaircraft artillery missile regiment (SAMMY, SARAH, SALLY).

d. Bridge Building Battalion (Heavy) (26 Officers and 368 Enlisted Men). The bridge building battalion (heavy) consists of a headquarters and service company, three bridge building companies, and an equipment transport company. It can build a 400-foot 60-ton heavy ponton bridge in 4 hours.

e. Road Construction Battalion (8 Officers and 520 Enlisted Men). The road construction battalion consists of a headquarters and service company and three road building companies. Each road building company contains technical equipment and supervisory personnel to utilize several hundred civil laborers or prisoners of war.

f. Assault Engineer Battalion (23 Officers and 276 Enlisted Men). The assault engineer battalion consists of a headquarters and service company and three assault companies. The assault company has four assault teams and a company headquarters

section. The assault teams are equipped for the destruction of enemy pillboxes.

g. Engineer Mining Battalion (18 Officers and 393 Enlisted Men). The engineer mining battalion consists of a headquarters and service company and three mine-laying companies. The mine-laying company has a headquarters section and three platoons. Each platoon has three trucks for personnel and mines. Each company carries a basic load of 1,000 mines.

h. Engineer Construction Battalion (22 Officers and 501 Enlisted Men). The engineer construction battalion consists of a headquarters and service company and three construction companies. The battalion is employed for general construction purposes.

59. Signal Units

a. Signal Communications Regiment (90 Officers and 780 Enlisted Men). This regiment consists of a regimental headquarters and three battalions. The regiment, or elements, is used to augment communications capabilities of other units.

b. Signal Communications Monitoring Company (5 Officers and 109 Enlisted Men). This company consists of a company headquarters and three monitoring platoons and is usually assigned to an army group but may be attached to an army or corps. It performs the counterintelligence functions of monitoring friendly communications.

c. Signal Communications Intercept Company (10 Officers and 162 Enlisted Men). This unit consists of the company headquarters, an intercept platoon, a direction finding platoon, and an analysis platoon. The mission of this company is the interception of enemy communications. It is normally assigned to the Army and army group and may also be attached to a corps.

d. Signal Communications Countermeasures Company (8 Officers and 150 Enlisted Men). This company consists of the company headquarters, an intercept and control platoon, and three jamming platoons. The mission of this company is the jamming of enemy communications by electronic means. It is assigned to the rifle corps, rifle army, and mechanized army, and may also be attached to divisions.

60. Chemical Units

a. Army Chemical Regiment (135 Officers and 1,050 Enlisted Men). This regiment consists of a headquarters and service ele-

ment (45 officers and 170 enlisted men), a chemical reconnaissance company (4 officers and 70 enlisted men), two chemical battalions (30 officers and 270 enlisted men each), a decontamination battalion (26 officers and 270 enlisted men). This regiment is normally assigned to the rifle and mechanized armies. It may also be assigned to the army group.

b. Corps Chemical Battalion (33 Officers and 475 Enlisted Men). This unit is composed of three chemical smoke companies, a chemical flamethrower company, and the battalion service troops. This battalion is the same as the chemical battalion, chemical regiment, and may also be attached to divisions. The chemical battalion is equipped to provide both offensive and defensive support involving the employment of smoke, flame, toxic chemicals, and bulk contamination or decontamination materials.

(1) *Chemical smoke company (5 officers, 105 enlisted men).* This unit consists of a company headquarters and three chemical smoke platoons. Each platoon has nine smoke generators.

(2) *Chemical flamethrower company (5 officers and 105 enlisted men).* This unit consists of a company headquarters and 3 chemical flamethrowers platoons armed with 9 portable flamethrowers each.

c. The Biological Warfare Company (3 Officers and 50 Enlisted Men). This unit has an offensive capability for biological warfare.

61. Transportation Units

a. Motor Transportation Brigade (353 Officers and 3,130 Enlisted Men). This brigade consists of three motor transportation regiments. The motor transportation brigade is normally assigned to the army group and may be attached to a rifle army to motorize it completely. The brigade is equipped with 720 3-ton trucks and 720 2-ton trailers, excluding its own service vehicles.

b. Army Motor Transportation Regiment (106 Officers and 985 Enlisted Men). This unit is the same as the motor transportation regiment of the motor transportation brigade (*a* above). It consists of two motor transportation battalions. The regiment has 240 3-ton trucks and 240 2-ton trailers, excluding its own service vehicles.

c. The Corps Motor Transportation Battalion (27 Officers and 285 Enlisted Men). This battalion consists of two motor transportation companies equipped with sixty 3-ton trucks and sixty 2-ton trailers each excluding their own service vehicles.

62. Psychological Warfare Units

Psychological warfare troops are organized into battalions which operate at army group level and into companies which operate at army level. The companies have teams which may be attached to divisions and other units.

a. Propaganda Battalion (37 Officers and 932 Enlisted Men). This battalion consists of 3 radio propaganda companies, 3 special operation companies, and a signal radio company. The number of these companies may be increased to fit special situations.

b. Propaganda Company (8 Officers and 166 Enlisted Men). This company contains a publication platoon and three combat propaganda platoons.

63. Helicopter Units

Generally, helicopter units are organized into battalions according to the type helicopter employed. Composite helicopter battalions are formed on a provisional basis as required by temporary attachment and detachment of different types of helicopter companies. Helicopters are part of Aggressor air forces and helicopter units are normally assigned, as required, to the air army of the army group.

a. Very Heavy Helicopter Battalion (138 Officers and 502 Enlisted Men). This battalion consists of a battalion headquarters and service company and three very heavy helicopter companies. The battalion has a total of 47 very heavy helicopters, H–5, and 8 light helicopters, H–1. With all very heavy helicopters operational, this battalion can lift about 280 tons at one time. Very heavy helicopter battalions are attached to rifle and mechanized armies, and army group as required. The battalion is normally not employed for flights over enemy-held areas.

b. Very Heavy Helicopter Company (43 Officers and 94 Enlisted Men). This company consists of a company headquarters and three very heavy helicopter platoons. Each very heavy helicopter platoon has five very heavy helicopters, H–5. The company headquarters has two light helicopters, H–1. With all very heavy helicopters operational, the company can lift about 100 tons of cargo at one time. This company is normally assigned to the very heavy helicopter battalion but can be detached and placed in support of any element within the army group.

c. Heavy Helicopter Battalion (138 Officers and 487 Enlisted Men). This battalion consists of a battalion headquarters and service company and four heavy helicopter companies. The battalion has a total of 61 heavy helicopters, H–4, and 10 light heli-

copters, H–1. This battalion can lift the assault elements of a rifle regiment in one move using 48 or more heavy helicopters. With all heavy helicopters in operation, this battalion can lift about 275 tons at one time. Two or more heavy helicopter battalions are normally attached to rifle and mechanized armies, and army group.

d. Heavy Helicopter Company (43 Officers and 94 Enlisted Men). This company consists of a company headquarters and three heavy helicopter platoons. Each heavy helicopter platoon has five heavy helicopters, H–4 . The company headquarters has two light helicopters, H–1. This company can lift the assault elements of a rifle battalion in one move using 12 or more helicopters. With all heavy helicopters operational, the company can lift about 70 tons of cargo at one time. This company is normally assigned to the heavy helicopter battalion but can be detached and placed in support of any element within the army group.

e. Medium Helicopter Battalion (176 Officers and 452 Enlisted Men). This battalion consists of a battalion headquarters and service company, 3 medium helicopter companies, and 1 light helicopter company. The battalion has a total of 9 light helicopters, H–1, 31 light helicopters, H–2, and 47 medium helicopters, H–3. This battalion can lift the assault elements of a rifle battalion in one move using 30 or more medium helicopters (H–3). With all helicopters in operation, this battalion can lift about 105 tons at one time. Three or more medium helicopter battalions are normally attached to each rifle army and one medium helicopter battalion or more is normally attached to a mechanized army.

f. Medium Helicopter Company (42 Officers and 90 Enlisted Men). This company consists of a company headquarters and three medium helicopter platoons. Each medium helicopter platoon has five medium helicopters, H–3. The company has 2 light helicopters, H–1, and 1 medium helicopter, H–3. With all helicopters operational, the company can lift at one time 30 tons *or* 120 litter casualties. This company is normally assigned to the medium helicopter battalion but can be detached and placed in support of any subordinate element within the army group.

g. Light Helicopter Company (41 Officers and 71 Enlisted Men). This company consists of a company headquarters and three light helicopter platoons. Each light helicopter platoon has 10 light helicopters, H–2. The company headquarters has 1 H–1 helicopter and 1 H–2 light helicopter. With all helicopters operational, the company can lift at one time about 12 tons *or* 93 litter casualties. This company is normally assigned to the medium helicopter battalion but can be detached and placed in support of any subordinate element within the army group.

CHAPTER 3
THE AGGRESSOR AIR ARMY

64. General

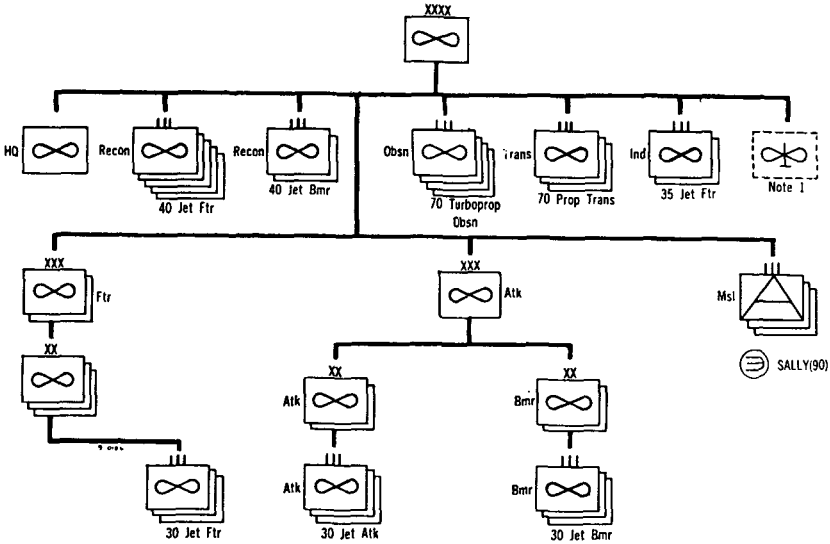
a. Aggressor Air Forces are organized into tactical air armies, naval aviation, long-range aviation, home air defense command, and the troop carrier command. The latter three are under the operational control of the Armed Forces High Command. Naval aviation is under the Naval High Command.

b. This chapter deals only with Aggressor tactical air armies which are subordinate to the army groups.

65. Tactical Air Army

a. The air army is a composite force consisting of varying numbers of fighter corps, attack corps, specialized regiments, and necessary ground and air service support units.

b. A typical air army consists of an attack corps, 2 fighter corps, 7 reconnaissance regiments, 3 transport regiments, 2 independent



Note 1. Helicopter units of various types are assigned as required. See paragraph 63.

Figure 42. Typical tactical air army.

fighter regiments, 4 artillery observation regiments, 3 antiaircraft artillery missile regiments (SALLY), and necessary ground and air service units (fig. 42).

66. Fighter, Bomber, and Attack Corps

a. The organization of a fighter, bomber, or attack corps is variable, consisting of two or more divisions and necessary supporting troops.

b. A typical fighter or bomber corps consists of three divisions of the appropriate aircraft and the necessary supporting troops (fig. 42).

c. A typical attack corps consists of 2 attack divisions, 2 bomber divisions, and the necessary supporting troops (fig. 42).

67. Air Division

a. An air division is a tactical organization of two or more air regiments. The air division does not have a fixed table of organization.

b. A typical air division consists of three air regiments and necessary supporting units.

68. Air Regiment

a. The air regiment is the largest flying unit with a fixed table of organization. Fighter, bomber, and attack regiments are usually assigned to air divisions. Specialized air regiments such as reconnaissance and artillery observation regiments are usually general headquarters units under control of the air army.

b. The more common air regiments are—

(1) *Fighter regiment (244 officers and enlisted men).* This regiment consists of a headquarters squadron and 3 fighter squadrons and has 30 jet aircraft.

(2) *Attack regiment (350 officers and enlisted men).* This regiment consists of a headquarters squadron and 3 attack squadrons and has 30 jet aircraft.

(3) *Bomber regiment (350 officers and enlisted men).* This organization is identical with the attack regiment, except it is equipped with jet bombers.

(4) *Artillery observation regiment (430 officers and enlisted men).* This regiment consists of a headquarters squadron and 4 observation squadrons and has a total of 70 aircraft. These regiments are usually under the operational control of the army group artillery officer.

(5) *Transportation and medical evacuation regiments.* These regiments consist of about 70 officers and 350 enlisted men and have about 70 propeller driven transport aircraft.

(6) *Reconnaissance regiments (430 officers and enlisted men).* The organization of this regiment varies slightly with the type of aircraft assigned to the regiment. The reconnaissance regiments are usually equipped with either jet fighter, jet attack, or twin jet bombers for a total of about 40 aircraft.

CHAPTER 4
THE AGGRESSOR NAVAL FORCES

Section I. MAJOR UNIT ORGANIZATION

69. General

The Aggressor nation has a Naval arm that ranks among the best in the world. The Navy is responsible for coastal defense, coast artillery, and coastal antiaircraft defenses. The military districts in the maritime areas of the homeland are commanded by naval officers.

70. Naval Air

The Navy air arm is small as compared to the tactical air force. The organization, training, and tactical operations of the Navy air arm are directly under the Naval High Command.

71. Naval Infantry

The Aggressor Navy maintains a well-trained marine force of naval rifle units.

Section II. NAVAL RIFLE ORGANIZATION

72. Naval Rifle Brigade

a. This brigade is a small combined arms force of Naval personnel especially trained and equipped for amphibious operations. The total brigade strength is 375 officers and 4,722 enlisted men.

b. The principal units of the naval rifle brigade are—

(1) *Four naval rifle battalions.* Each battalion has 58 officers and 874 enlisted men (par. 73).

(2) *Amphibious tank battalion (22 officers, 184 enlisted men).* This battalion consists of a headquarters and service company and four amphibious tank companies. Each company is equipped with 5 amphibious tanks armed with an 80-mm gun.

(3) *Brigade artillery (42 officers, 436 enlisted men).* The brigade artillery consists of a headquarters and service battery, a howitzer battery with four 120-mm howitzers, an antitank battery with four 80-mm antitank guns, a

mortar battery with four 120-mm mortars, and an antiaircraft battalion. The antiaircraft battalion has four antiaircraft batteries each equipped with six 20-mm antiaircraft guns.

(4) *Engineer assault battalion (23 officers, 276 enlisted men).* This battalion is very similar to the army general headquarters engineer assault battalion (par. 58*f*).

(5) *Headquarters and service troops (53 officers, 280 enlisted men).* Included in the service troops are a motor transport company with sixty 3-ton trucks and trailers and an amphibious tractor company with sixty 7-ton amphibious vehicles (SPIDER).

73. Naval Rifle Battalion

a. The principal units of the naval rifle battalion are—

(1) *Four naval rifle companies.* Each naval rifle company has 8 officers and 162 enlisted men. The naval rifle company has four rifle platoons which have four seven-man squads with one light machinegun and six rifles each, an antitank platoon with four 80-mm launchers, and a mortar platoon with four 81-mm mortars.

(2) *Heavy machinegun company (3 officers, 27 enlisted men).* This company has four heavy machineguns.

(3) *Antitank company (3 officers, 27 enlisted men).* This company has four 55-mm AT guns.

(4) *Mortar company (3 officers, 27 enlisted men).* This company has four 81-mm mortars.

(5) *Naval engineer assault company (6 officers, 75 enlisted men).* This company has 4 assault platoons each armed with 2 light machineguns and 14 submachineguns.

(6) *Headquarters and Service company. (3 officers, 40 enlisted men).*

b. The naval rifle battalion also exists as a separate organization.

74. Naval Amphibious Tractor Battalion

This is a separate naval amphibious unit consisting of 31 officers and 360 enlisted men. The battalion has a headquarters and service company and 4 amphibious tractor companies equipped with 60 amphibious vehicles (SPIDER).

PART TWO
TACTICAL DOCTRINE

CHAPTER 5
BASIC PRINCIPLES

75. General

a. Aggressor tactical doctrine is based on the principle that decisive victory on the battlefield is achieved only by the offensive. While Aggressor troops are well trained in defensive operations, Aggressor believes that only by the attack can the commander retain the initiative and control the vital factors of time and space.

b. The figures cited in chapters 7, 8 and 10 for depths and frontages for tactical operations are general guides. Aggressor experiments freely in the employment of units and formations to further develop offensive tactical doctrine and achieve surprise.

76. Mass

Aggressor achieves mass in decisive areas by concentrating men, materiel, and firepower. His ability to mass conventional fires in the forward battle area is increased by use of nuclear fires for the attack of deep targets. The concentration of assault units and supporting arms is usually made under cover of darkness or reduced visibility by moving rapidly from march columns. This concentration is maintained only for the minimum necessary time. Large static concentrations of forces and equipment are avoided.

77. Dispersion

When not concentrated for a specific tactical mission, Aggressor units are dispersed to the maximum, consistent with the terrain and anticipated employment. Wherever possible, Aggressor tries to have regimental assembly areas of at least 12 to 15 square miles. Division assembly areas are at least 60 square miles wherever possible. Corps concentration areas are at least 250 to 300 square miles wherever possible.

78. Surprise

Surprise is sought at all times in order to paralyze the enemy's

will to resist and deprive him of the ability to react effectively. Surprise is achieved by—

a. Strict secrecy measures.

b. Concealment and rapid concentration of forces and materiel at the decisive point.

c. Use of airborne forces.

d. Sudden employment of mass fires, including air and missile delivered, which may or may not be limited to nuclear fires, followed by rapid offensive action.

e. Exploitation of unfavorable weather and terrain.

f. Application of new combat methods.

g. Detailed deception measures.

79. Command

a. Unity of command at all echelons is practiced. A force of combined arms is commanded by the senior combat arms officer present. Air armies supporting ground forces are under the command of army group commanders. All commanders, up to and including those of the mechanized rifle division and the rifle corps, are required to make detailed personal reconnaissance and to exercise close personal supervision of critical actions.

b. Every commander of a battalion or larger unit has a political staff officer. This officer has strong influence in personnel matters and, at times, in tactical decisions.

c. Commanders are permitted considerable initiative provided the intent of the higher commander is not violated. In the event of a sudden change in the situation where it is not possible to receive new instructions, the commander, on his own initiative, makes a new decision. This decision is transmitted at the first opportunity to the next superior and to adjacent units.

80. Control

a. Measures to insure continuity of operations in the face of nuclear attacks are reduced to standard operating procedures. Divisions and larger units habitually establish alternate command posts. The alternate command posts are established, where possible, at such distance from the primary command post to prevent destruction of both by a weapon of at least 100-KT yield. Alternate command posts have complete communication nets and are manned by skeleton staffs that keep abreast of the current situation. The alternate headquarters assumes command on order or when the main headquarters is rendered inoperative.

b. Major reliance is placed on radio communications. Wire communications, although considered a secondary means, are used

to the maximum permissible extent. Radio and wire communication nets are established on a multilateral network basis to insure maximum flexibility.

81. Control of Nuclear Weapons

a. Delivery means of tactical nuclear weapons, including air, are under direct command of the army group commander. He has the authority to further delegate their control and to allocate nuclear fires. Except for delivery means with ranges exceeding about 150 miles, control of atomic fires and delivery means is usually delegated to armies. Armies may further delegate control to corps and/or line divisions. Normally control is not delegated to divisions. All commanders without control of appropriate delivery systems or nuclear fires recommend nuclear targets to support their mission to the next higher commander.

b. The lack of control of some nuclear delivery systems at division level as a normal practice is a potential vulnerability. This vulnerability is increased in circumstances where the effectiveness of Aggressor communications has been appreciably reduced.

82. Unit Structure

Aggressor units are organized to permit the employment of mass and maneuver. Thus, Aggressor units are—

a. Heavily supplied with armor and automatic weapons to provide great firepower.

b. Designed to permit flexibility of operations by ready adaptability to varying combat organizations.

c. Equipped with transportation suitable for battlefield maneuver.

d. Capable of absorbing large numbers of supporting units, particularly artillery, including nuclear weapons, and armor, in order to provide shock action and an overwhelming mass of fire.

83. Combined Arms

a. Military operations are considered as the integrated combat employment of all arms with artillery, armored forces, and airpower essential to success. These arms, however, have as their primary role the support of rifle and mechanized rifle units. Rifle and mechanized rifle units provide the base of fire, manpower and momentum which bring about the ultimate defeat of the enemy; artillery and nuclear weapons provide massed firepower; and armored forces provide mobile firepower and shock action.

b. Aggressor units are rarely employed without reinforcements or attachments. Rifle and mechanized rifle units are usually rein-

forced with armor, engineers, and additional artillery of all types, including missiles. The mission and forces available determine the amount and type of reinforcements or attachments.

84. Fire Support

a. Nuclear weapons are integrated with artillery and air to achieve devastating massed fire support. In both the offensive and the defensive, lavish use is made of artillery and airpower, supplemented by nuclear fires. Nuclear fires may completely, or in part, replace nonnuclear artillery and air fires in preparations and counterpreparations, particularly when surprise is a major consideration. This permits the use of the available nonnuclear artillery and air for increased and closer support of the attacking or defending troops.

b. Artillery at all levels is massed at the points of main effort but is echeloned in depth. The desired concentration of artillery averages about 250 pieces, including medium and heavy mortars, per mile of front of the main effort. To achieve the desired artillery concentration, other areas may be relatively denuded of artillery support. See chapters 9 and 11 for use of artillery.

c. Fighter units of the air army also have the mission of preventing enemy delivery of air-dropped nuclear weapons. Attack and bomber units have the mission of destroying enemy nuclear delivery means as well as air dropping nuclear weapons upon the enemy.

85. Defensive Measures Against Nuclear Attack

a. Maximum defensive measures are taken against nuclear weapons effects consistent with accomplishment of the mission. Nuclear defense measures are detailed and reduced to standard operating procedures. These defense measures are a command responsibility with chemical and engineer personnel furnishing technical advice and assistance. In all operations, battalions and larger units prepare detailed plans covering measures to be taken in the event of an enemy nuclear attack.

b. In all operations, maximum use is made of the terrain and weather for passive defense against nuclear effects. For example, artillery positions are selected to take advantage of terrain irregularities as a partial defense against thermal effects of nuclear detonations.

c. Maximum use is made of dispersion. Dispersion is achieved by increasing distances between units of battalion size.

d. Deep entrenchments with overhead cover for personnel and subsurface shelters for tanks, vehicles, and supplies are provided

where possible. Assembly and concentration areas are prepared, if the situation permits, with subsurface shelters before occupancy.

e. Camouflage and concealment measures are emphasized. All major troop movements behind the line of contact are usually made at night or during other periods of limited visibility. Such movements are executed as rapidly as possible and are rigidly controlled to prevent undue massing.

f. Total radiological dose limits for individuals are announced by the Ministry of Armed Forces but may be altered temporarily by army or army group commanders.

86. Combat Intelligence and Counterintelligence

a. All units are trained in combat intelligence and counterintelligence. The Aggressor staff organization for combat intelligence is comparable to that employed by the US Army. Intelligence activities of units are closely controlled by the next higher headquarters. Deep aerial reconnaissance is used extensively. Camouflage and concealment practices are highly developed and are incorporated into detailed deception plans at all command levels.

b. In addition to normal intelligence objectives, the combat intelligence effort concentrates on the following:

(1) Enemy nuclear attack capabilities and indications of enemy use of nuclear weapons.

(2) Changes in enemy deployment, particularly those indicating withdrawals or requiring a change in Aggressor plans, particularly for use of nuclear weapons.

(3) Targets suitable for attack by nuclear weapons, to include location of enemy nuclear weapons delivery means including air bases utilized by planes capable of delivering nuclear weapons.

(4) Location of major enemy radar and air defense installations.

c. Aggressor maintains large numbers of signal units capable of communication intercept, analysis, and electronic countermeasures. These units are usually assigned or attached to all combined arms headquarters down to and including the rifle corps.

d. Clandestine agents are used in large numbers. They are normally controlled at the army and army group level. Wide use is also made of partisan groups and stay-behind elements for the collection of information, conduct of subversive activities, and sabotage.

e. Within divisions, emphasis, is placed on scouting and patrol-

ling and ground reconnaissance. All reconnaissance units are used primarily for intelligence purposes. These units fight only to obtain information and are normally not used for sustained combat or as economy of force units.

87. Electronic Warfare Operations

Aggressor is capable of locating, identifying, and rapidly jamming all types of electronics communication devices over a wide range of frequencies. Aggressor utilizes either spot (one frequency) or barrage (band of frequencies) jamming of tactical radio nets when such jamming is more desirable than the intelligence which can be obtained from such nets. Airborne and ground based electronic jamming equipment is used to jam and confuse enemy early warning and gun-laying and missile-controlling radars. This permits surprise air attacks and denies the enemy the use of radar controlled fires.

88. Chemical and Biological Warfare Operations

a. The initial use of chemical or biological warfare is controlled by the Ministry of Armed Forces. Once toxic chemical agents have been used, control of chemical operations involving such agents is delegated to the rifle corps and the mechanized army. The use of smoke is controlled by divisions. Employment of biological agents normally is coordinated at army group level or higher.

b. Aggressor is capable of large-scale operations utilizing chemical and biological agents comparable to those available to United States forces. Coordinated use of such agents in all types of offensive and defensive operations is stressed. Several agents are used at various points at the same time to gain maximum effect. Emphasis is on bulk dissemination from aircraft and from munitions of simple design. Aggressor CW and BW tactics closely parallel those of the United States in many respects.

c. (1) Toxic chemical agents are used quickly in the offense and without warning in order to inflict maximum casualties and restrict use of important areas and facilities. High persistency chemical agents are used to contaminate obstacles on roads and routes used by enemy troops, artillery and mortar positions and observation posts. Such agents also are used on roads in the rear of enemy units to hinder their disengagement and to assist in isolating them and for flank protection of Aggressor units. Bivouacs, supply installations and rear assembly areas also are considered appropriate targets. Low per-

sistency chemical agents are used against frontline troops, forward assembly areas, and heavy troop concentrations to inflict immediate casualties and to neutralize artillery and mortar fire. Smoke is used to screen movements and deny enemy observation. Incendiary and flame materials are used extensively in supporting assault forces in the reduction of pillboxes and strong points.

(2) Chemical agents are widely used in the defense. High persistency chemical agents are used to contaminate terrain vital to enemy forces in the attack, in order to restrict enemy movements. Low persistency chemical agents are used to cause casualties among attacking enemy troops, and to disrupt, slow, or canalize enemy attack formations. Smoke is used to blind or hamper the enemy attack, to screen preparations for counterattack or withdrawal, or to produce a thermal radiation attenuation cloud to reduce the effect of nuclear fires. Flame is used to demoralize and inflict casualties on enemy assault troops, to strengthen antitank defenses, and assist in the counterattack.

d. (1) Biological warfare agents are utilized to attack enemy personnel, causing death or disability directly by use of antipersonnel agents or indirectly by attacking a nation's animal and plant resources. Although primarily used in strategic operations, BW agents may also be used during preparatory phases of any large-scale offensive to destroy the effectiveness of enemy troops. Suitable targets include islands, assembly areas, water reservoirs, air bases, ports and harbors, as well as large area, poorly defined, personnel targets.

(2) In the defense, BW agents may be used to hinder the enemy's offensive effort. Antipersonnel agents may be used to reduce enemy strength in reserve and assembly areas, and anticrop defoliating agents may be used in improving fields of fire or eliminating natural concealment from possible enemy routes of approach and attack positions.

89. Individual Tactics

All troops are trained in patrolling, fieldcraft, camouflage, and night operations. The individual Aggressor soldier is clever at improvisation, adept at living off the land, and capable of enduring hardships. These characteristics are exploited to achieve surprise

by attack over difficult terrain and under adverse weather conditions.

90. Administrative Support of Combat Operations

a. The chief of rear services is the unit deputy commander for rear services of his unit. At division and lower levels, he is charged with the entire logistical support of the unit to include command of the organic units engaged solely in logistical activities. At army and higher levels, the chiefs of the technical branches are responsible for the supply of items pertaining to their services. The chief of rear services at these levels is responsible for supply of common items, such as rations and petroleum products, and for the overall coordination of the logistical effort including transportation and evacuation. The impetus of supply is from rear to front. Within divisions, regiments and separate units draw supplies from the division distributing points using organic transportation. The Aggressor supply system is capable of supporting sustained operations over long distances.

b. Aggressor uses two methods for replacing combat losses. The usual method is to replace complete divisions and separate battalions and regiments when they have lost combat effectiveness. The other method is individual replacement of combat losses. Individual replacement is used only on a small scale and usually only to replace losses of officers and key technicians.

CHAPTER 6
THE ADVANCE

Section I. ADVANCE TO CONTACT

91. General

a. Plans for the advance to contact are as detailed as time permits and are based on information of the enemy, weather, terrain and the scheme of the anticipated battle to include planned nuclear fires. Particular attention is paid to passive defense measures against nuclear attack, antitank, antiaircraft security, and combat deception measures.

b. All available air supports the advance. Air support provides continuous reconnaissance, assists in destruction of forces interfering with the advance, attacks enemy reserves, delivers nuclear fires, and provides column cover. Air liaison officers who can either call for air support or direct column cover aircraft to specific targets, accompany all regimental and higher headquarters and principal security elements.

c. Marches are normally made at night or under conditions of limited visibility. Unopposed marches are continued without interruption until contact with the enemy is made. March deception plans are habitual. Feint marches on different routes may be made.

92. Security

All march elements are responsible for their own security in all directions. Security elements prevent surprise attacks by the enemy on the main body and permit deployment of the main body under favorable conditions. Security is furnished by advance guards, flank guards, rear guards, and march outposts. Flank and rear guards either move in coordination with the main body or establish a series of outposts protecting the passage of the main body. Strength and composition of security elements depend on the mission, enemy situation, terrain, size of the unit being protected and the time it requires for deployment. Security elements are habitually reinforced with artillery, tanks, self-propelled guns, engineers, and chemical units as required.

93. Advance Guard

a. Advance guards normally are assigned the following missions:

(1) Screen and secure the advance on the main body.

(2) Seize critical terrain features until the arrival of the main forces.

(3) Determine the enemy composition, disposition, and defenses, with particular attention to the enemy's nuclear capabilities.

b. The composition of the advance guard varies with the tactical situation, terrain, and size of the unit. The advance guard is usually composed of reconnaissance, rifle, armor, engineer, artillery, and chemical units. The advance guard moves by bounds from one terrain objective to the next. Advance detachments from the advance guard may be sent forward to seize specific terrain features until the arrival of the advance guard. These terrain features include road junctions, obstacles, and defiles.

94. Antiaircraft Security

a. Antiaircraft security measures include—

(1) Ground air observation and warning nets within all march elements.

(2) Camouflage measures and utilization of routes concealed from air observation.

(3) Coordination of ground antiaircraft fires with employment of fighter aviation.

(4) Preplanned actions to be taken by troops if attacked by enemy air.

b. Antiaircraft artillery less than 80-mm in caliber are dispersed within the columns of their organic units. On receipt of an air alarm these weapons halt at the roadside and prepare to engage enemy aircraft. They may be sent ahead, protected by the advance guard, to cover the passage of the unit through defiles. Medium-caliber antiaircraft artillery (80-mm antiaircraft guns) and larger and missiles protect columns by moving by bounds in echelon. Several parallel columns may be protected simultaneously. Division antiaircraft artillery protects only the division and its attachments. Corps and attached antiaircraft artillery protect the main body of the corps.

95. Antitank Security

Antitank warning nets are established within all march elements. All march elements contain self-propelled guns and/or

antitank guns. When contact is imminent and the enemy has an armor attack capability, security elements are reinforced with additional antitank weapons. When an enemy tank attack is imminent, antitank guns take up firing positions. These positions may be in advance of the columns they are protecting. Hasty temporary minefields may be set out if time permits. These mines are recovered when the advance resumes.

96. Engineer Support

Engineers assist in the reconnaissance of roads, defiles, bridges, river crossings, bivouac sites, and water supply sources. They also mark march routes, prepare cross-country routes, repair and strengthen bridges and roads, clear obstacles and passages through radioactive areas.

97. Radiological Security Measures

All units are responsible for continuous radiological reconnaissance in their zone of advance or along their march route. Plans are made prior to the march for area decontamination. Announced total dose limits may be exceeded temporarily by the army commander to permit rapid passage of radiological contaminated areas that cannot be readily bypassed. This is done only when absolutely required to accomplish the mission.

98. Rifle and Mechanized Armies

The advance to contact is made on a broad front in parallel columns. All armies are usually assigned zones of advance. Armies normally screen their advance by employing mechanized divisions. If mechanized rifle divisions are not available, motorized rifle divisions, reinforced with tank, antitank artillery, self-propelled gun, and reconnaissance units, are used.

99. Rifle Corps

a. The rifle corps is normally assigned a zone of advance. The march formation consists of two or more main columns. Exceptionally, the rifle corps may march in one column. The composition and number of columns are determined by the mission, road net, terrain conditions, enemy capabilities, and the anticipated tactical plan. All divisions, if possible, move on separate parallel routes. Exceptionally, two divisions may move in column on one route. The distance between divisions moving on the same route may be up to 15 miles. The rifle corps mechanized rifle division normally screens the corps advance. The rifle corps mechanized rifle division may be used under army control to screen the advance of the army.

b. Nondivisional elements of the rifle corps and attached army artillery, tank, and other units may be attached to divisions for the advance to contact. Those elements not in division march columns move in separate columns on the same or different routes. Nondivisional columns are normally provided with antiaircraft protection. The corps antitank reserve is echeloned in the direction of the most likely enemy armor threat and moves by bounds.

100. Rifle Division

a. The rifle division is normally assigned either a zone of advance or a specific route. The march formation usually consists of two or more columns. A march formation of one column is avoided wherever possible. March columns are divided into march serials and march units. The time gaps between the columns of the division depends on enemy capabilities and march conditions.

b. When moving in one column, the division normally uses a reinforced rifle regiment as an advance guard. When the division moves on several routes, each leading rifle regiment uses a reinforced rifle battalion as its advance guard. Advance guards are used even if the division is marching behind another division of the rifle corps. The distance between the advance guard and the main body may be as much as 5 miles.

c. The division rear guard is usually composed of a rifle regiment reinforced with artillery, tanks, assault guns, and small engineer and chemical units. The distance between the rear guard and the main body may be as much as 7 miles.

d. Flank guards and outposts are dispatched as required. Normally, they are not more than 2 miles from the column. The composition of flank guards and outposts varies with the terrain and the situation.

e. Tank and self-propelled guns move at the head of the main body. The bulk of the artillery marches with the main body and/or advance guard in order to permit early deployment and rapid organization of artillery groups. The bulk of the available antitank artillery follows the advance guard along the principal route of march. The antitank artillery reserve is echeloned towards the direction of the most likely enemy armor threat and moves by bounds.

f. The division commander and his staff usually move at the head of the main body. Division trains follow their units in separate columns. Regimental trains may be placed under division control.

101. Mechanized Rifle Division

a. The division is normally assigned a zone of advance. The march formation usually consists of two or more columns advancing on a front that may be as wide as 13 miles. Mechanized rifle regiments are usually at the head of the march columns followed by the medium and heavy tank regiments. March columns of regimental size are preceded by an advance guard of a mechanized rifle battalion reinforced with armor and artillery. The advance guard overcomes local opposition or bypasses it, if it is possible to do so and still keep the main body from being forced to deploy. Every effort is made to advance as far as possible before deployment.

b. The flanks of the zone of advance are protected by supporting aircraft and flank security detachments strong in armor.

c. Tanks and assault guns are carried on wheeled transports, whenever possible, until contact with the enemy is imminent.

102. Rifle Regiment and Rifle Battalion

a. The regiment is normally assigned one or more routes of march. While the regiment may march on 2 or more parallel routes, the battalion normally marches on only 1 route. When marching on a separate route, the regiment normally sends out an advance guard of reinforced battalion strength and a rear guard of reinforced company strength. The distance from the head of the main body to the rear of the advance guard may be up to 8 miles for a motor movement and 4 miles for a foot movement. Advance guards, rear guards, and flank guards send out advance parties which, in turn, send out points. A regiment marching as part of the main body of a division sends out only local security.

b. A battalion moving on a separate route or as the advance guard, rear guard, or flank guard of a regiment, sends out an advance party up to the size of a reinforced company. Other security detachments to the flanks or rear may be up to the size of a reinforced platoon. Such flank and rear security detachments are generally within about 2 miles of the unit. These detachments either move in coordination with the main body or establish temporary outposts. Outposts join the rear of the column.

c. The regiment acting as the advance guard, flank guard, or rear guard of a larger force is organized for the march in the same manner as if it were marching independently.

d. Battalion and regimental trains normally march in separate columns between the main body and the rear guard. Battalion and regimental trains may march under division control.

Section II. MEETING ENGAGEMENT

103. General

a. Meeting engagements are characterized by—

(1) Rapid changes in the situation and fluid operations on a wide front.

(2) Rapid changes in combat formations.

(3) Open flanks for friendly and enemy forces.

b. Success in a meeting engagement is achieved by rapid and aggressive action and the coordinated use of all arms despite lack of detailed knowledge of enemy dispositions. The goal is to disorganize, divide the enemy, and destroy the divided forces in turn. This may be accomplished by a smaller force if it acts aggressively and launches a coordinated attack faster than the larger force.

c. Air burst nuclear weapons are used to destroy enemy forces and their reserves. Delivery of nuclear weapons is usually made by artillery, mobile rocket launchers, and light bomber and attack aircraft of the supporting air army. Small-yield nuclear weapons are usually used because of troop safety requirements.

d. In a meeting engagement, emphasis is placed on flank and rear security. This security is obtained by deep air and ground reconnaissance, and by the use of security detachments strong in antitank and antiaircraft artillery. Units are expected to be able to meet sudden enemy attacks from any direction.

104. Reconnaissance

Air and ground reconnaissance is intensified as contact becomes imminent. Enemy columns, particularly armor and artillery, are kept under constant surveillance and are attacked at the earliest practicable time.

105. Action Upon Contact With an Undeployed Force

a. The advance guard overruns the forward enemy units while tanks and self-propelled guns attack the enemy main body and artillery from the flanks and rear. Every effort is made to split the enemy column, destroy isolated elements, and attack from the enemy rear. Artillery and air are used throughout the attack as they become available. Rifle units are deployed as close to the enemy and in as much depth as possible. Regrouping and centralization of fire support control are accomplished by successive commanders as soon as possible, but not at the expense of delaying combat operations. Uninterrupted pressure on the enemy is maintained.

b. Self-propelled guns cover the advance of tanks by following closely and engaging enemy strong points and antitank weapons. Before the attack of enemy armor, efforts are made to separate any accompanying enemy infantry. If a strong enemy antitank screen is located, rifle elements attack first, followed by tanks and self-propelled guns. Against superior enemy armor, Aggressor tanks may withdraw, protected by the fires of the self-propelled guns, and attempt to ambush the pursuing enemy tanks.

106. Action Upon Contact With a Deployed Enemy

a. The advance guard attacks and tries to locate the enemy flanks while the main body deploys. The main body attacks with least practicable delay. The attack of the main body is supported by all available air and artillery, including nuclear fires. A hasty coordinated attack from the march can be made by division size units within about 5 to 6 hours. A similar attack by a corps can be made within 8 hours. A deliberate attack is made in accordance with normal offensive procedures if the available intelligence indicates that the enemy is defending in force.

b. If the attack of the advance guard is stopped and the enemy counterattacks, the advance guard holds sufficient ground to cover the deployment of the main body. If this fails, the main body deploys on the nearest suitable terrain. Leading armored units may deliberately withdraw as a deception measure to lure the pursuing enemy into ambushes by self-propelled guns or heavy tanks.

CHAPTER 7
MAJOR OFFENSIVES

Section I. GENERAL

107. Basic Principles

a. Aggressor conducts major offensives by employing one or more army groups to capture objectives which may be more than 400 miles distant. The offensive takes the general form of deep armored thrusts, preferably through the weakest parts of the enemy defenses, combined with wide encirclements designed to destroy large enemy forces and cause the collapse of resistance on a wide front.

b. When the enemy forward defenses have been breached by rifle armies by either penetrations or flank attacks, the offensive is continued by mechanized armies and motorized rifle armies. These mechanized and motorized armies defeat in detail those enemy reserves that can influence the battle or relieve enemy forces isolated in the forward areas.

c. Under conditions of nonatomic warfare, the width of the attack zone and depth of the attack formation of the rifle army and its subordinate elements are reduced by about one-third.

108. Large-Scale Offensives

a. Large-scale offensives usually start after intensive artillery, nuclear and air preparations. Rifle and mechanized rifle forces are organized into echelons to break through the forward enemy defenses and push deep into the enemy rear. The number of echelons in the attack formation depends upon the mission, means available, terrain, and strength of enemy defenses. The greater the depth of the enemy defense, the greater the number of echelons in the formation. In an attack supported by nuclear weapons, a two-echelon formation is normally used. If the attack is not supported by nuclear weapons, a three-echelon formation may be used, particularly if the enemy is very strong. A one echelon formation may be used against a very weak enemy or in a secondary attack.

b. In a large-scale offensive, Aggressor usually attacks at a number of points on a broad front, with heavy concentrations of ar-

tillery, armor, airpower, and nuclear fires at the decisive points. Normally, Aggressor seeks a double envelopment in order to surround and destroy the enemy. If the enemy flanks are not assailable, or cannot be bypassed, the double pincer maneuver is used (fig. 47).

c. Mobility, fluid tactics, maintenance of the momentum of the attack and close contact with enemy are emphasized. Every opportunity to envelop the enemy and to attack him from the rear is exploited in order to surround and subsequently destroy him. Radioactive contaminated areas are bypassed or crossed rapidly in order to maintain the momentum of the attack. Although Aggressor will not needlessly expose his troops, he will temporarily accept considerable risks in order to accomplish his mission.

109. Nuclear Weapons Employment

a. Main efforts are supported by nuclear fires. If nuclear weapons are available in sufficient numbers, secondary efforts are also supported by nuclear fires. Targets selected for nuclear weapons must be of a type that cannot be handled more economically by nonnuclear means. Also, they should not create control problems that will endanger the success of the operation.

b. In a major offensive, the principal uses of nuclear weapons are—

(1) Initial preparation.
(2) Reduction of enemy defenses or forces that may slow the offensive.
(3) Elimination of enemy troop concentrations and reserves.
(4) Prevention and destruction of enemy counterattacks.
(5) Attack of enemy nuclear weapons delivery means including air bases that cannot otherwise be eliminated.

c. The allocation of nuclear weapons for the above purposes varies with the strength of the enemy defenses and the scheme of maneuver. Normally, the largest allocation is for destruction of the enemy tactical forces (usually the corps in contact). The next largest allocations are normally for destruction of large enemy reserves and enemy nuclear weapons delivery means. Some nuclear weapons are held in reserve to support the mechanized army when committed and for unforeseen contingencies.

d. Before the actual start of the offensive, only deep targets are attacked with nuclear fires in order to achieve surprise and to hide the location of the main effort. Suitable targets for such attack are enemy air bases nuclear delivery means and storage sites, and large troop and supply concentrations. Enemy forces in close

contact (battalions and battle groups) are not usually attacked with nuclear fires. Nonnuclear artillery and air are normally massed on such targets. Close-in targets are usually attacked last in order to achieve surprise as to the exact location of the main effort.

110. Basic Maneuvers

a. To ultimately surround and then destroy the enemy, Aggressor employs these five basic maneuvers:

(1) Double envelopment.
(2) Single envelopment .
(3) Penetration.
(4) Multiple penetration.
(5) Double pincers.

b. The multiple penetration and double pincer maneuvers are normally used only by armies and army groups. The other maneuvers may be used by forces of any strength, with the size of the objective and the distance to it in keeping with the capabilities of the force.

111. Double Envelopment

Aggressor uses the double envelopment whenever possible. It is the most decisive maneuver and contributes most effectively to the concept of encirclement and destruction of the enemy. As this maneuver normally requires a preponderance of force, it is used only when the balance of forces is such that there is little risk of defeat in detail.

112. Single Envelopment

When there is an opportunity to pin hostile forces against an obstacle, the single envelopment may be used. This maneuver per-

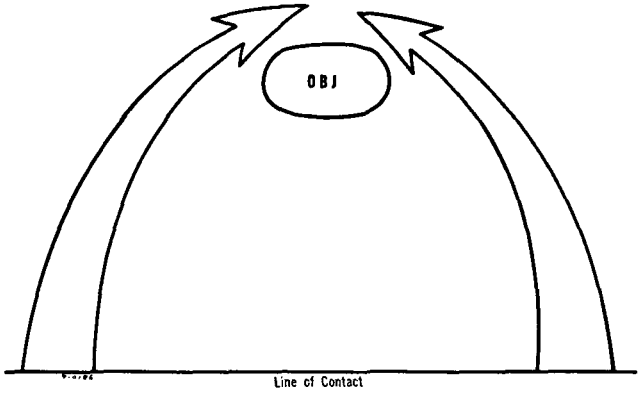


Figure 43. Double envelopment.

mits concentration of effort in one direction, thus helping to insure combat superiority over the enemy in the decisive area. The ultimate aim of the single envelopment is complete encirclement of the enemy, a task made easier if the obstacle is impassable.

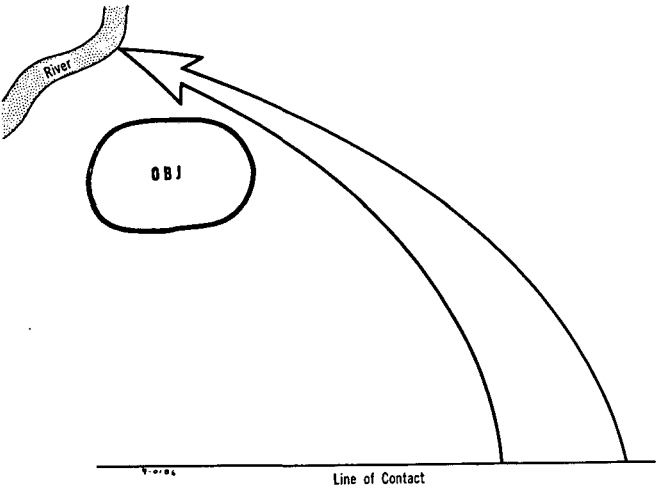


Figure 44. Single envelopment.

113. Penetration

A penetration on a relatively narrow front, with subsequent widening of the gap and exploitation, may be used in order to split the enemy. Forces on the flanks of the penetration are enveloped, isolated, and destroyed. This maneuver is especially well suited to the Aggressor concept of mass because it permits concentration of force in one direction and possible defeat of the enemy in detail. The use of nuclear fires facilitates this maneuver.

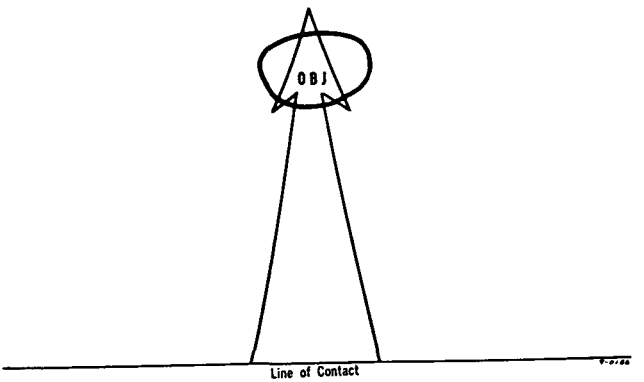


Figure 45. Penetration.

114. Multiple Penetration

When a double envelopment is not possible, Aggressor may use the multiple penetration if his forces are sufficiently strong. This maneuver consists of a series of penetrations to the depth of the enemy corps reserves with subsequent encirclement and destruction of the separated enemy forces. Large forces are required for this maneuver as encirclement of the divided enemy leads to considerable dispersion. This maneuver destroys the continuity of the hostile defense, leads to collapse of the defense in areas large enough to provide ample maneuver room for further operations, and reduces the effectiveness of hostile counterattacks. The availability of large numbers of nuclear weapons facilitates this maneuver.

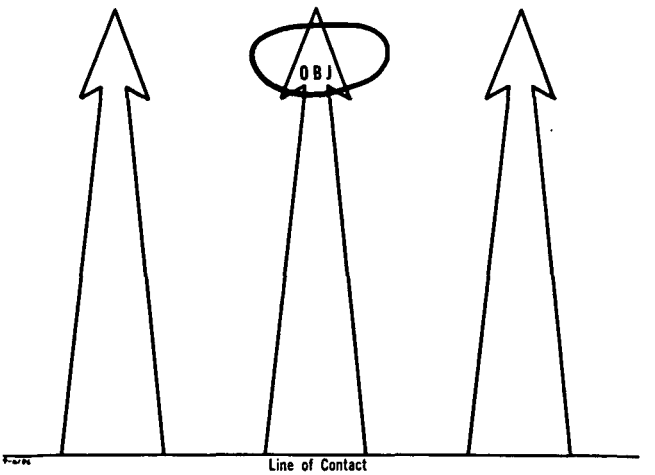


Figure 46. Multiple penetration.

115. Double Pincers

When a double envelopment is not possible because the enemy flanks are not assailable, Aggressor may use the double pincers maneuver. In this maneuver, two penetrations are made initially so as to create interior flanks that are assailable. Mobile forces attacking through the gaps, make a deep envelopment of the hostile groups selected for destruction. The envelopment may be deep enough to include the enemy corps reserves. The mobile forces, when they meet, form outer pincers by facing outward and preventing enemy reinforcements from reaching the surrounded units. Nuclear fires are used to help accomplish this. Other forces, forming the inner pincers, operate within this perimeter to divide and destroy the isolated hostile forces. Inner pincer forces often try to compress the encircled enemy into nuclear targets.

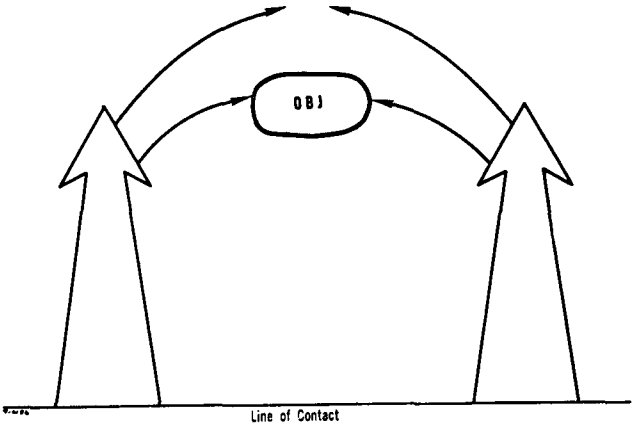


Figure 47. Double pincers.

116. Planning for the Offensive

a. Planning for the offensive by the army group is initiated in anticipation of or upon receipt of directives from the Ministry of Armed Forces. The first stages of the offensive are planned in great detail. Subsequent stages are planned only in outline form. An army group can prepare a plan for a major offensive in 2 weeks or less when the planning is concurrent with the planning of subordinate headquarters.

b. Deception plans and detailed security measures are integral parts of all offensive planning. Information concerning the preparatory measures for the offensive are disseminated to the minimum necessary personnel. The following security measures, among others, are rigidly enforced:

(1) Ground reconnaissance forward of the line of contact is limited to the units already in contact. Reconnaissance behind the line of contact by large advance parties is prohibited.

(2) Normal radio traffic patterns and volume are maintained. Opening of new radio nets is prohibited.

(3) Normal patterns and scale of weapons fires, air activities, and outward logistical activities are maintained.

(4) Maximum use is made of liaison officers for transmitting orders and plans.

(5) Newly arrived units, redispositions of forces, engineer construction, and movements of supplies required for the offensive are carefully concealed.

117. Phasing of Major Offensives

a. Major offensives normally consist of three phases:

(1) The first phase consists of the breakthrough, encirclement, and destruction of the enemy forces in contact, to include enemy corps reserves. This phase lasts about 2 to 6 days and is carried out to a depth of approximately 80 to 150 miles.

(2) The second phase is the destruction of the enemy strategic reserves, i.e., the army or theater reserves, by mechanized and motorized rifle armies. This phase lasts about 3 to 5 days and carries the advance approximately 60 to 150 miles farther.

(3) The third phase is pursuit of enemy remnants and the securing of the army group objective by all armies spearheaded by the mechanized army. It may also consist of a deep pursuit into the enemy logistical base. The phasing of the offensive is flexible and depends on factors such as the nature of the enemy's defenses, terrain, and road net. Aggressor attempts to maintain an average rate of advance of about 25 miles per day.

b. Under conditions of nonnuclear warfare, the general phasing of a large offensive remains unchanged except for the average rate of advance. The first phase, lasting about 2 to 6 days, involves the breakthrough and the destruction of the enemy in contact and his immediate reserves to a depth of at least 30 miles. The second phase, lasting about 3 to 8 days, is the exploitation of the breakthrough and includes the blocking or destruction of the enemy army reserves, seizure of critical terrain, and consolidation of gains; this may involve an area 30 to 150 miles from the original line of contact. The last phase, seizure of final objectives and destruction of enemy theater of army reserves, may take place in an area 150 to 300 miles from the original line of contact and may last from 5 to 10 days.

118. Army Group Frontages and Depths

a. The army group zone of action is usually about 100 miles wide and about 100 to 150 miles deep exclusive of the area for administrative support units and installations. Under nonactive nuclear conditions, the width of the army group zone may be narrowed to about 60 to 100 miles with no significant change in the depth.

b. The total width of the army group main effort area or areas varies, but normally does not exceed one-third of the total width of the entire army group zone. The army group main efforts may

be made at different parts of the army group zone. Usually not more than two main efforts are made.

119. Army Group Formation

a. The army group usually attacks in two echelons. A one echelon attack, with all armies in line, is rarely employed and then only against an extremely weak enemy. The composition of each echelon depends on the nature of the enemy defenses, the terrain, and availability of nuclear fires.

b. In an offensive against a strong enemy, or in terrain not permitting use of large masses of armor, or when available nuclear fires are limited, a typical army group will usually use the following formation:

First echelon —Two or three rifle armies.
Second echelon—One rifle army and the mechanized army; or just the mechanized army.

c. In an offensive against a weak enemy, or where terrain permits use of large masses of armor, and adequate nuclear fires are available, the army group will usually use the following formation:

First echelon —One rifle army and one mechanized army.
Second echelon—Two rifle armies.

d. The depth of the army group attack formation depends on the terrain, weather, and available assembly and concentration areas. The ability of the enemy to attack units beyond the line of contact and interfere with their movements is also considered. Usually the depth of the army group first echelon formation extends to about 40 miles behind the forward edge of the battle area. The army groups second echelon is usually initially located in assembly areas about 40 to 60 miles behind the line of contact in order to permit prompt commitment and still achieve dispersion in depth.

120. Concentration for the Offensive

a. Units to participate in the offensive, and not already in contact, are assembled in rear areas adjacent to the location of the main effort. Assembly areas for assault divisions are generally about 20 miles behind the forward edge of the battle area. Assembly areas are selected away from cities, important communication centers or other possible nuclear targets. Assembly areas are usually large enough to permit 1 mile between battalion-size forces. Passive defense measures against nuclear weapons in assembly areas are described in chapter 12.

b. Units move into assembly areas at the last possible moment. Movements to assembly areas and attack positions are made as far

as possible by motor and are conducted in about the same manner as an advance to contact. Assembly areas are occupied just long enough to make last-minute preparations. Movements from the assembly areas to attack positions are usually made during the night preceding the start of the offensive. The movement to the attack position, made in either regimental or battalion columns, is timed to reach the attack position just prior to the firing of the preparation. Tank and self-propelled gun units move from assembly areas to attack positions at such times that the noise of their movement is masked by the preparatory fires. Artillery units move at the last possible time to be in position to support the attack 24 hours prior to the launching of the offensive.

Section II. THE RIFLE ARMY

121. Tactical Employment

a. The rifle army in the first echelon of the army group attack formation is usually employed for—

(1) Penetration and envelopment of the enemy forward defenses.
(2) Destruction of encircled forces.
(3) Consolidation of overrun areas.
(4) Pursuit.

b. The rifle army in the second echelon of the army group attack formation is employed for—

(1) Support of mechanized armies.
(2) Pursuit.
(3) Consolidation of overrun areas.
(4) Outflanking of enemy defenses.
(5) Protection of flanks against enemy counterattacks.
(6) Reinforcement of the first echelon rifle army.
(7) Widening of gaps created by the first echelon rifle army.

122. Rifle Army in the First Echelon of the Army Group Formation

a. The army is expected to advance in the first 2 to 6 days to a depth that will destroy the enemy tactical defenses and corps reserves. The rifle army is furnished additional transportation by the army group to motorize rifle elements in order to maintain the momentum of the attack.

b. The normal attack formation is in two echelons. The first echelon of this rifle army usually consists of two rifle corps. The second echelon of this rifle army consists of one rifle corps and

the rifle army reserves. The reserves may include separate rifle, tank, and mechanized rifle units made available by the army group. When no separate armored units are available, the rifle army may retain control of one or more mechanized rifle divisions of the subordinate rifle corps, usually from the corps in the second echelon. The rifle army may also retain a rifle division or regiment from one of the rifle corps in army reserve. This rifle reserve is used for immediate replacement of rifle units destroyed by enemy nuclear fires.

c. This army normally has an attack zone about 10 to 20 miles wide when it is part of the army group main effort. If it is part of the army group secondary effort the frontage may be increased up to 30 or 50 miles and all rifle corps may be in the first echelon of the army attack formation. The depth of the rifle army attack formation is about 40 miles. Under conditions of nonactive atomic warfare, the width of army attack zones may be reduced by as much as one-half but the depth of the attack formation remains unchanged.

123. Rifle Army in the Second Echelon of the Army Group Formation

This army is normally initially held in large assembly areas up to 60 miles behind the forward edge of the battle area. Upon commitment it is reinforced with artillery and motorized.

124. Preparatory Fires

a. The initial preparation is coordinated and controlled by rifle armies in the first echelon of the army group attack formation. Nuclear preparatory fires on relatively close-in targets are normally made immediately before the air and nonnuclear artillery preparation. When nuclear fires are used in the preparation, the air and nonnuclear artillery preparation usually lasts from about 15 to 40 minutes. This permits sufficient time for poststrike damage assessment, return of close-support aviation to the area, and still does not allow the enemy enough time to recover from the effects of the atomic fires. Preparatory fires are so intensive that they are often referred to as the "artillery offensive." The preparation silences the bulk of the enemy's supporting fires and neutralizes the enemy forces in immediate contact. The exact duration of the preparation depends on the extent of the areas to be neutralized, available air and artillery support, and ammunition resources. When nuclear fires are not employed in the preparation, the air and conventional artillery preparation is of longer duration, varying from 30 minutes to 2 hours or more.

b. The second echelon rifle army is usually committed after the army group has made an advance of about 50 or more miles. The area of commitment is normally on the flank of a first echelon army. A short but heavy preparation, including nuclear fires and air support, usually precedes the commitment. This preparation is fired by the organic and attached artillery of the army, reinforced by some of the artillery of the first echelon. At times nuclear fires alone may constitute the preparation. A density of 125 artillery pieces per mile of front is sufficient to support the commitment if an artillery preparation is fired.

c. The commitment of a second echelon rifle army is carefully coordinated by the army group in order to minimize presenting lucrative nuclear targets to the enemy. Once committed the second echelon rifle army rapidly deploys to an attack zone about 20 miles wide.

Section III. THE RIFLE CORPS

125. General

a. The mission of the rifle corps in the first echelon of the rifle army (in the first echelon of the army group) is to destroy enemy resistance to the front and to create gaps sufficiently large to permit employment of large mobile forces of the army group such as the mechanized army or the second echelon rifle army. The rifle corps is expected to advance far enough in the first day or two of the offensive to destroy the continuity of the tactical defenses of the enemy, including his corps reserves. Then, in accordance with the rifle army scheme of maneuver, the advance is continued for further operations against other enemy reserves or for the destruction of the encircled enemy forces.

b. The rifle corps in the second echelon of the rifle army (in the first echelon of the army group) is used—

(1) To widen gaps created by the first echelon.

(2) To outflank enemy defenses.

(3) To block counterattacks against the army flanks.

(4) To destroy encircled enemy forces.

(5) To reinforce the army first echelon.

c. The discussion of the rifle corps in this section deals with the rifle corps in the first echelon of the rifle army (in the first echelon of the army group). It is generally applicable to the rifle corps, when committed, of the second echelon of the rifle army (in the first echelon of the army group) and to the rifle corps of the rifle army in the second echelon of the army group.

126. Attack Formation

a. Usually the rifle corps attacks in two echelons. When attacking a weak enemy, or as part of a secondary effort, the rifle corps may attack in one echelon. The corps usually does not attack in three echelons unless assigned a very narrow attack zone. The first echelon of the rifle corps usually consists of one rifle division and a mechanized rifle division. The second echelon consists of a rifle division. All rifle divisions are motorized if the corps is making the main effort of the army. The corps second echelon is initially dispersed in assembly areas 10 to 12 miles in rear of the first echelon. It maintains close liaison with the first echelon and moves by bounds behind it. If the expected enemy resistance or nature of the terrain does not permit the use of the mechanized rifle division in the first echelon, it is employed in the second echelon. In that event the first echelon will consist of two rifle divisions.

b. In nonatomic warfare there is no change in the usual corps attack formation except that the mechanized rifle division is usually used in the first echelon only against a weak enemy.

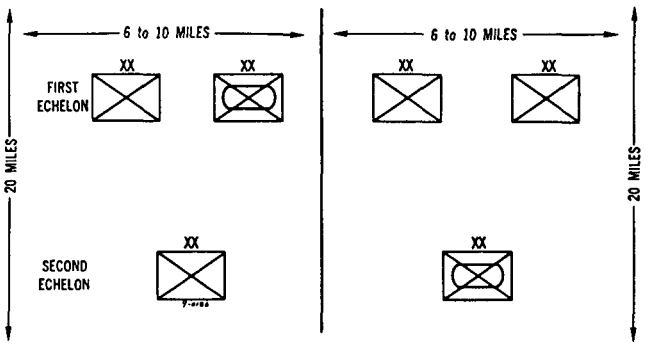


Figure 48. Typical rifle corps attack formations.

127. Frontages and Depths

a. The rifle corps in the first echelon of the rifle army will usually have an attack zone varying from approximately 6 to 10 miles wide and with a tactical depth of about 20 miles. The width of the attack zone depends on the mission assigned to the corps. If the corps is making the main effort of the army, the attack zone will usually not exceed about 10 miles.

b. In nonactive atomic warfare, the width of a rifle corps attack zone may be reduced to about 5 to 7 miles in a main effort and to about 14 miles in a secondary effort. The depth of the rifle corps under these conditions is reduced to about 12 to 17 miles.

128. Use of Nuclear Fires

The attack of a rifle corps as the main effort of the rifle army is usually supported by nuclear fires. Nuclear fires are normally utilized in the preparation to destroy enemy division and corps reserves and other targets beyond the reach of the mass of artillery. The nonnuclear artillery and air preparation concentrates on the forward enemy elements.

129. Corps Reserves

The corps second echelon in effect is the corps reserve. In addition, the corps commander may retain control of one rifle regiment of a subordinate division as a general troop reserve. This is usually done when the enemy is relatively strong in nuclear firepower. The general troop reserve is used to replace rifle units made ineffective by nuclear fires, to protect flanks, and for antiairborne, antiguerilla, and similar operations.

130. Conduct of the Attack

Strong points that hold up the advance are bypassed and reduced by the second echelon. Strong enemy counterattacks are dealt with by nuclear fires or by the second echelon. The second echelon is committed without hesitation to maintain the momentum of the attack. If the enemy uses nuclear fires, the offensive continues with minimum necessary reorganization. If necessary, unit replacements are made promptly from the corps troop reserve or from the reserves of higher headquarters. Once the corps objective has been captured, strong security detachments remain to secure the objective and the major elements move to dispersal areas.

Section IV. THE RIFLE DIVISION

131. General

The mission of a rifle division in the first echelon of a rifle corps is to break through the defenses of the opposing enemy division. When this is done the rifle division continues the attack against the enemy corps reserves. The object of the rifle unit attack is to destroy the cohesive defense of the enemy, dividing him into small isolated groups and destroying each group in turn.

132. Attack Formation

The rifle division, part of the first echelon of the rifle corps, normally attacks in two echelons. The first echelon of the rifle division usually consists of two rifle regiments reinforced with tank

companies and self-propelled guns from the division medium tank regiment. The second echelon consists of one rifle regiment.

133. Frontages and Depths

a. The maximum width of the attack zone of a rifle division of the first echelon in the main effort is about 5 miles. The depth of the division formation may be up to 5 or 6 miles. When the division is attacking as part of a secondary effort, the width of the attack zone may be increased to about 8 miles with no significant change in depth of the formation.

b. Under conditions of nonnuclear warfare, the rifle division of the first echelon in the main effort has an attack zone about 2 to 3 miles wide. The depth of the attack formation may be reduced with the division second echelon following the first echelon at a distance of about 3 miles.

134. Preparation for the Attack

a. Maximum effort is made to conceal all preparations for the attack. Camouflage discipline is strictly enforced. Ground reconnaissance before the attack is deep and extensive. As a security and deception measure, intensive reconnaissance is carried out along the entire front not just in the areas of the main efforts. This reconnaissance is carried out by divisional, regimental, and battalion rifle and reconnaissance elements of the units in contact. Reconnaissance seeks to obtain a complete and continuous picture of the enemy capabilities, vulnerabilities, and the terrain under his control. Ground reconnaissance is supplemented by all available intelligence information collection means. Reconnaissance is so controlled that plans for the offensive are not revealed.

b. The division moves by motor into assembly areas up to about 20 miles from the line of departure. The stay in assembly areas is limited to the time necessary to assign missions to subordinate units, check preparations, and organize combat groups for the attack. On the night preceding the attack, the division moves by motor as close as possible to the attack positions in battalion and regimental size columns. March columns are preceded by antitank units. Attack positions and assembly areas are prepared, wherever possible, with subsurface shelters before occupancy. Arrival at the attack positions is timed to just precede the start of the nuclear preparatory fires. The division medium tank regiment moves after the preparation has started so that the noise of its movement is masked.

135. Conduct of the Attack

a. Covered by the artillery preparation, rifle units and their ac-

companying tanks move through previously cleared lanes through obstacles to close with the enemy. The assault usually starts at dawn. Assault units move within 100 yards of the artillery impact areas and take advantage of the darkness to close with the enemy. During the assault, antitank guns and 81-mm mortars are under the control of the supported units. Regimental artillery supports the assault in depth and prepares to displace forward promptly. Extended fire duels with enemy centers of resistance are avoided. Small detachments are left to contain the bypassed enemy.

b. Regimental and battalion artillery concentrates fire on enemy antitank defenses. Riflemen and engineers protect the tanks from hostile infantry, neutralize antitank minefields and other antitank obstacles, and help evacuate damaged tanks. Tanks do not normally outdistance their supporting rifle units by more than 400 yards.

c. During the advance through the enemy position, special antitank groups composed of antitank guns, self-propelled guns, and engineers armed with flamethrowers follow in rear of the assault groups. The antitank groups block frontal counterattacks while tanks engage the enemy from the flanks.

d. When the rifle unit advance has driven through the initial enemy positions and has reached the enemy light artillery positions, widening of the breach, destruction of the bypassed centers of resistance, and exploitation of the breakthrough are undertaken by the second echelon, assisted by some of the assault groups. The remainder of the first echelon force consolidates captured positions, prepares to repel counterattacks, or regroups and continues the advance.

136. Second Echelon and Reserves

a. The second echelon is used to protect flanks, repel counterattacks, maintain the impetus of the assault, mop up centers of resistance bypassed by assault units, and exploit breakthroughs. In effect, the second echelon performs the tasks of a reserve. The second echelon normally follows the first echelon by about 5 miles and is usually committed from the march.

b. The medium tank regiment of the division is not normally kept in division reserve as a unit. One or two tank companies and two or three assault guns may be kept under division control for commitment with the second echelon.

c. When the rifle division attacks in one echelon, 1 or 2 reinforced rifle battalions are retained under division control as the division reserve.

Section V. THE RIFLE REGIMENT

137. General

The mission of a rifle regiment in the first echelon of the division is to break through the enemy forward defenses to at least the depth of the enemy light artillery positions. When this is done the regiment continues the attack against the enemy division reserves. The rifle regiment in the attack is normally supported by artillery, tanks, self-propelled guns, and engineer troops. The amount and type of supporting units depend on the nature of the terrain and the expected enemy resistance. In an attack against a strong enemy, the regimental artillery group is supported by as many as four field artillery battalions as well as additional antitank and antiaircraft artillery units.

138. Attack Formation

The attack formation of the rifle regiment is determined after consideration of the mission, terrain, character of enemy defenses, and means available. Normally the rifle regiment attacks in 2 echelons with 2 reinforced rifle battalions in the first echelon and 1 rifle battalion in the second echelon.

139. Frontages and Depths

a. The attack zone of a rifle regiment in the first echelon of the division main effort is about 2 miles wide. The depth of the attack formation is about 4 miles. The attack zone of a rifle regiment in the first echelon of the division secondary effort may be up to 4 miles wide without change in the depth of the formation.

b. In nonatomic warfare, the attack zone of a rifle regiment in the first echelon of the division main effort may be only about 1 mile wide and in a secondary effort about 2 miles wide. In either case, the depth of the attack formation is about 2.5 miles.

140. Regimental Second Echelon

The regimental second echelon, usually a reinforced battalion, is essentially the regimental commander's reserve. It is used to reinforce the first echelon, to consolidate gains, to outflank enemy defenses, to mop up bypassed resistance, and to block counterattacks from the flanks. The second echelon follows the first echelon by about 4 miles and is usually committed from the march.

141. Preparation for the Attack

In the preparation for the attack described in paragraph 134, attack positions for the rifle battalions are selected by the regi-

mental commander behind the last available terrain feature which can be reached without exposure to hostile observation and small arms fire. These positions may be in line or at varying distances from the line of contact. In any case, the advance is so timed that all battalions of the regimental first echelon cross the line of departure at approximately the same time.

142. Conduct of the Attack

a. The regimental attack is conducted generally as outlined in paragraph 135. The regimental commander uses the fire and movement capabilities of rifle battalions and supporting units to maintain the momentum of the attack. Enemy strong points that cannot be immediately reduced are bypassed. Small elements are detached from the rifle battalions of the first echelon to block these strong points. The regimental second echelon is used to destroy the isolated strong points.

b. As the second phase of the attack develops, the actions of the rifle battalions are coordinated by changes of direction, where necessary, and by readjustment in supporting artillery fires. During this phase the regimental commander is particularly alert for enemy counterattacks from the flanks supported by armor. Regimental antitank reserves are used to counter such threats. Hasty antitank minefields are used to block approaches favorable to the enemy. When the enemy armor threat no longer exists, the antitank mines are recovered and moved forward by the regimental engineer company assisted by rifle elements.

c. Should a weak point in the enemy defenses develop, the second echelon is promptly committed to encircle and destroy the enemy. Adjacent units, that may be held up, are assisted by fire only, provided it does not interfere with the advance of the regiment.

143. Regimental Artillery Units

a. Self-Propelled Gun Company. The six 80-mm self-propelled guns are used to give close support to the rifle elements. Normally, they are placed in direct support of the first echelon rifle battalions. Moving closely behind the rifle troops, they provide direct fire support from the flanks or through gaps between attacking companies.

b. Mortar Company.

(1) The regimental attack order normally prescribes general location of firing positions, sequence of firing missions, time to open fire, and communication coordination with rifle and tank units. Target distribution and displace-

ment plans are prepared by the regimental artillery commander in coordination with the supporting artillery. After participation in the preparation, the mortar company is assigned a general support mission. As the attack develops, particularly during the second phase, one mortar platoon may be attached to each first echelon rifle battalion. One platoon is usually retained under regimental control for support of the second echelon when committed.

(2) Mortars of the regiment in the second echelon of the rifle division may be employed to support the initial phases of the attack of the first echelon. These mortars revert to control of their regiments when the regiment is committed.

c. Antiaircraft Battalion. The 40-mm gun battery is normally used to protect the regimental artillery. The 15-mm machinegun battery is used to protect rifle units. Firing positions of the 15-mm machinegun battery are close behind the supported units. When the enemy air threat is slight, both batteries are used for ground support fires. Platoons of both batteries are placed in direct support of rifle battalions. Firing positions are close behind the supported units.

d. Antitank Company. The guns of this company are normally attached to the rifle battalions of the first echelon. The number of guns attached to a rifle battalion depends upon which part of the regimental sector is considered most vulnerable to enemy armor. Normally, at least two antitank guns are kept in a regimental antitank reserve. Antitank guns follow close behind the rifle battalions to which they are attached. They displace to successive firing positions for direct fire at enemy tanks and self-propelled guns. Antitank guns are also used for direct fire against strong points.

e. Recoilless Rifle Company. This company is employed in the same manner as the regimental antitank battery.

144. Regimental Combat Support Units

a. Reconnaissance Company. Under the operational control of the regimental intelligence officer, this company is used to maintain contact with the enemy, to provide flank security, and to maintain contact with adjacent units.

b. Engineer Company. This company lays and clears minefields, creates and removes obstacles, and provides engineer assistance to other regimental units. Small elements of the company may be part of the regimental antitank reserve.

c. Chemical Defense Squad. This squad performs radiological reconnaissance and decontamination.

Section VI. THE RIFLE BATTALION

145. General

The mission of both rifle and mechanized rifle battalions in the regimental first echelon is to break through the enemy forward regiments or battle groups. When this is done, the battalions continue the attack along designated directions. Rifle battalions in the assault are normally supported by 1 tank company and 1 self-propelled gun platoon from the division medium tank regiment.

146. Attack Formation

a. The attack formations used by the battalion are—

(1) Line of companies.
(2) Wedge of companies.
(3) Inverted wedge of companies, echelon right or left.
(4) Column of companies (in the attack of heavily fortified zone).

b. A base company regulates the advance. The other rifle companies guide on the base company.

147. Frontages and Depths

The attack zone of a rifle battalion in the first echelon of the regimental main effort is about 1 mile wide. The depth of the attack formation may be up to 2 miles. In nonatomic warfare the attack zone of a rifle battalion in the first echelon of the regimental main effort is about 1,000 yards wide.

148. Preparation for the Attack

Within the battalion attack position, the rifle companies are placed, as far as possible, directly opposite their initial objectives. Supporting weapons occupy positions from which they can support the attack. Battalion mortars normally occupy positions not more than 400 yards behind the leading rifle companies. Platoons and squads of the battalion machinegun company initially occupy positions on the flanks of the battalion or in the gaps between the rifle companies and rifle platoons. Attached direct fire support artillery occupies camouflaged firing positions either directly behind the battalion, or on the flanks, or in the gaps between rifle companies.

149. Conduct of the Attack

a. The attack is conducted generally as outlined in paragraphs 135 and 142. The attack is considered to start on crossing an assault line which is designated by the battalion commander. This assault line, about 200 yards from the enemy, is close enough to permit reaching the enemy positions in one bound but yet out of danger of friendly artillery firing on the enemy main battle zone.

b. The rifle company, once through enemy forward obstacles, normally attacks in a line of skirmishers. It may also attack in two waves, using a shallow wedge or an inverted shallow wedge. The advance of the company is controlled by designation of a base platoon.

c. The rifle platoon, on passing through the obstacles, usually takes up a skirmish formation with all rifle squads abreast. A base squad is designated in order to regulate the advance. The platoon advances by squad bounds using fire and movement. The platoon leader designates, by voice and hand signals, the firing positions and sequence of movement of squads. Squad leaders designate the firing positions of the members of the squad and guide on the base squad. Automatic weapons support the advance of the rifle platoon from successive positions, generally on the flanks of the platoon. Upon signal for the assault, the rifle platoon advances using marching fire. Normally, the crossing of the assault line by tanks is the signal for the assault. If the assault fails, the platoon digs in as close to the enemy as possible and prepares to renew the assault. The assault is repeated until the attack succeeds or is cancelled by higher headquarters. Should the enemy counterattack, all units take up the defensive. Every means is used to hold the ground gained. If the enemy counterattack is in conjunction with tanks, the rifle units concentrate on destroying the accompanying enemy infantry. The advance is resumed at the first opportunity.

d. If the assault succeeds, the attack is continued. Halts for reorganization are held to the minimum. Gaps in the enemy fires and defenses are exploited in an effort to attack individual strong points and antitank gun positions from the rear. The advance is pushed vigorously, regardless of the progress of adjacent units.

150. Separate Companies of the Rifle Battalion

a. Machinegun Company. While normally employed for ground support missions, the machinegun platoons may be assigned a secondary mission of antiaircraft defense. The machinegun platoons are usually attached to rifle companies. The entire com-

pany may at times be held under battalion control for general support missions.

b. Mortar Company. This company is employed generally in the same manner as the regimental mortar company (par. 143*b*).

c. Antitank Company. The battalion antitank company is usually held in reserve for employment in repelling counterattacks. Attached direct fire guns usually support the rifle companies.

d. Antiaircraft Company. This company is employed generally in the same manner as the 15-mm machinegun battery of the regimental antiaircraft battalion.

Section VII. THE MECHANIZED RIFLE DIVISION OF THE RIFLE CORPS

151. General

The mission of the mechanized rifle division in the first echelon of the rifle corps is to break through the entire zone defended by the enemy divisions in contact. When this is done, the attack is immediately continued to break through the entire zone defended by the enemy corps in contact.

152. Attack Formation

The mechanized rifle division usually attacks in two echelons. The first echelon usually consists of either 2 mechanized rifle regiments or 1 mechanized rifle regiment and the medium tank regiment. The second echelon consists of either the heavy tank regiment and 2 mechanized rifle regiments or the heavy tank regiment, 1 mechanized rifle regiment, and the medium tank regiment.

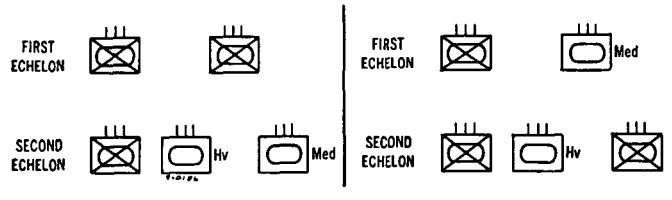


Figure 49. Rifle corps mechanized rifle division typical attack formations.

153. Frontages and Depths

The maximum width of the initial attack zone of a mechanized rifle division in the main effort is about 6 miles. The depth of the division formation is about 10 miles. When the division is attacking as part of a secondary effort, the width of the attack zone may be increased to about 10 miles with no significant change in the

depth of the formation. Once through the forward enemy defenses, the width of the attack may be extended to as much as 25 miles. The maximum width depends on the terrain and the enemy strength.

154. Conduct of the Attack

a. The attack position for the first echelon is normally about 2 to 3 miles from the line of departure. The mechanized rifle division advances rapidly with the first echelon in 2 parallel regimental columns about 2 or 3 miles apart. Only the companies within the regimental columns are partially deployed. The columns are preceded by advance detachments which are heavily reinforced with armor and artillery. Flanks of the column are protected by reconnaissance units. Radiological reconnaissance is continuous by all elements. Deployment of the columns takes place only when necessary to overcome resistance that is holding up the advance and cannot be bypassed. The second echelon follows the first echelon in dispersed battalion columns at a distance of up to 15 miles.

b. Attacks are made on the flanks and rear of enemy positions. Moving rapidly, the mechanized rifle division overruns and destroys isolated enemy groups. If resistance is too great, the assault is broken off, and containing forces are left to await the arrival of motorized rifle units, and the mechanized rifle units move on. Crossroads, bridges, and other terrain features that will cut off the enemy are seized. Enemy command posts and logistical installations are overrun, and every effort is made to retain the initiative and maintain the impetus of the attack. With its balanced power, the mechanized rifle division concentrates on rapid, slashing attacks and leaves the destruction of strong centers of resistance to the following motorized rifle divisions. If the enemy commits sizable reserves, the mechanized rifle division attacks them with nuclear fires or uses minimum rifle forces to block them and continues the advance.

c. In an attack not supported by nuclear fires, the mechanized rifle division frequently attacks in the same manner as a rifle division. The exploitation role is undertaken as soon as possible.

155. Mechanized Rifle Regiment

This regiment is organized for combat on the basis of battalion combat teams of all the arms and services represented within the regiment. The medium tank battalion normally supports the two reinforced mechanized rifle battalions forming the regimental first echelon. The reconnaissance company and the 55-mm self-

propelled antiaircraft battery are normally retained under regimental control.

156. Medium Tank Regiment

The medium tank regiment may be employed independently under division control or the medium tank battalions may be placed in support of the mechanized rifle regiments. When the mechanized division is attacking on a wide front, the tank battalions of the medium tank regiment are usually placed on support of the mechanized rifle regiments.

157. Heavy Tank Regiment

The heavy tank regiment may be employed independently under division control or the heavy tank battalions may be used to support the medium tank regiment and the first echelon mechanized rifle regiments. When the mechanized rifle division is attacking on a wide front, the heavy tank regiment battalions are usually used to support the medium tanks of the leading mechanized rifle regiments.

Section VIII. THE MECHANIZED ARMY

158. General

a. The mechanized army is committed as early as possible in the offensive in order—

(1) To catch the enemy off balance.

(2) To encircle rapidly the enemy in the forward areas before they can be reinforced.

(3) To exploit the effects of nuclear fires.

b. When not in the army group first echelon, the mechanized army is usually committed by the end of the second day of the offensive. This corresponds to the time by which the rifle armies of the first echelon of the army group should have created a large enough gap in the enemy defenses to permit the commitment of the mechanized army.

159. Attack Formation

a. The mechanized army usually attacks in two echelons. A one-echelon formation may be used against a very weak or overextended enemy. A three-echelon formation is rarely used. The first echelon of the mechanized army usually consists of the two mechanized divisions. The second echelon usually consists of the two tank divisions.

b. The first echelon of the mechanized army usually attacks in parallel columns preceded by strong advanced detachments reinforced with artillery and armor. The second echelon is employed where its great shock action and mobility will best insure the uninterrupted advance of the mechanized army.

160. Frontages and Depths

a. The attack zone of a mechanized army in the first echelon of the army group formation is usually not less than 10 miles wide. If a narrower attack zone is required, then the mechanized rifle division is normally not used in the army group first echelon.

b. The attack zone of a mechanized army, once past the forward enemy defenses, may increase up to about 50 miles in width. The depth of the initial attack formation is about 20 miles. The mechanized army may be committed through a gap only 10 miles wide. Once through the gap, the mechanized army deploys to its normal attack zone.

161. Conduct of the Attack

a. A short but intense preparation of about 20 minutes is usually fired by all available air and artillery in the area, prior to the commitment of the mechanized army. If necessary, the artillery of the first echelon of the mechanized army participates in this preparation. Nuclear fires are delivered just before the preparation. If the enemy is very weak or has been completely neutralized by nuclear fires, the nonnuclear preparation may be omitted.

b. The mechanized army advances to the line of departure with the divisions of the first echelon in column formation. Deployment of the first echelon takes place only when required by enemy resistance. The mechanized army maintains rapid and uninterrupted movement. Resistance that cannot be quickly overcome is bypassed. Maintenance of close contact with the enemy is stressed. The mechanized army breaks contact with rifle armies if necessary to maintain contact with the enemy. The mechanized army maintains an average rate of advance of about 20 to 40 miles a day, depending on enemy resistance and terrain.

c. When a mechanized army in the first echelon of the army group has completed an encirclement of the forward enemy defenses, it then attacks any enemy forces advancing to the relief of the encircled enemy. At the first indications of an enemy withdrawal, the mechanized army starts in pursuit. The destruction of encircled enemy forces is left to rifle armies.

162. Employment of Mechanized Rifle Divisions

The mechanized rifle division of the mechanized army generally attacks in the same manner as the mechanized rifle division of the rifle corps (pars. 151–157).

163. Employment of Tank Divisions

a. The tank divsion is used to create and maintain shock deep in the enemy rear; prevent or break up formation of hasty rear defense positions; disrupt enemy command, communications, logistical installations; and overrun communications centers, airfields, and nuclear weapons launching sites. Its operations are closely coordinated with the operations of the mechanized divisions. If the mechanized army is forced to assume the defensive, the tank divisions are used as mobile reserves.

b. The tank division organizes combat teams based on the three medium tank regiments. The mechanized rifle regiment battalions are used to support the three medium tank regiments. The heavy tank regiment battalions support the medium tank regiments.

164. Logistics

The mechanized army attaches sufficient transportation to the mechanized rifle and tank divisions to enable these divisions to carry enough supplies to be independent of army supply points for each phase of the offensive. Resupply takes place at the completion of each phase of the offensive. Mechanized rifle and tank divisions in a major offensive are logistically self-sufficient for about 6 days.

CHAPTER 8
PURSUIT

Section I. GENERAL

165. Basic Principles

Aggressor considers pursuit as an operation to complete the destruction of a retreating enemy. Pursuing Aggressor forces do not exclusively follow a retiring enemy, but parallel his retreat, cutting off segments of the withdrawing columns as the opportunity presents itself. The objective is to cut off and completely destroy the enemy. In pursuit operations, nuclear fires are employed on enemy concentrations, defiles, and possible enemy defense areas. Control and allocation of nuclear fires, particularly small-yield weapons with highly mobile delivery systems, may be delegated to division commanders.

166. Planning

a. Planning for pursuit is started before the attack. Plans include—

(1) Consideration of possible enemy routes of withdrawal, and determination of critical terrain features to be seized.

(2) Composition of pursuing forces, including attachment of artillery and supporting air units.

(3) Schemes of maneuver for the delay of withdrawing forces and attack of hostile strong points and rear installations.

(4) Allocation of nuclear weapons and delivery systems.

b. Subordinate echelons develop their own plans in accordance with those of higher commanders. Rifle and armored units plan the missions of the artillery and air units that will be attached or supporting them when the pursuit is initiated.

Section II. RIFLE UNITS IN THE PURSUIT

167. General

Rifle units used for pursuit operations are motorized and reinforced with additional armor. They are usually used to follow

armored and mechanized spearheads, consolidating the gains and reducing bypassed strong points. Rifle units are also used for maintaining steady pressure against the rear of the retreating enemy.

168. Pursuit by Rifle Divisions

a. When the rifle division initiates pursuit, tanks of the medium tank regiment, supported by motorized rifle units, parallel the lines of retreat to block, cut off, and destroy segments of the enemy columns. Direct pressure on the enemy by units in contact is increased across the entire zone of action so as to make the formation of enemy march columns difficult. Second echelon regiments are moved forward for rapid advance in the main direction of pursuit and early commitment.

b. The division organizes motorized pursuit groups to follow the tank spearheads. A pursuit group normally consists of a rifle company, a reconnaissance squad, an engineer squad, and an antitank gun platoon. Pursuit groups harass the flanks of the retreating columns. Strong points bypassed by the tank columns are attacked and destroyed. Hastily organized defenses are attacked without delay, the assault being launched directly from march column. When possible, hostile rear guards are bypassed and their routes of withdrawal blocked by mines and demolitions prepared by engineers of the pursuit groups.

c. Division artillery and mortar units are attached to rifle regiments. They interdict defiles on the lines of retreat in order to cut off the enemy and prevent the arrival of reinforcements. As the pursuit develops, they advance by bounds so that one echelon is in position to fire while the other is displacing. Attached nuclear delivery means are retained under division control. Supporting air units interdict bottlenecks on the routes of retreat with nuclear and nonnuclear fires, keep the enemy under constant surveillance and attack, reconnoiter for advancing hostile reinforcements, and protect the pursuing units from hostile air attack.

d. Security is organized at the regimental echelon. Antitank units protect the flanks of the pursuing units against armored counterattacks. Flank and rear security is provided by rifle elements. Rear security groups keep the lines of communications free of enemy stragglers.

169. Pursuit by Rifle Regiments

The rifle regiment, at the first opportunity, starts in pursuit. Pursuit operations continue until halted by the division commander. During the initial phase of a pursuit, the regiment strives

to prevent the enemy from breaking contact. Elements in contact with the enemy maintain pressure. Defiles on the enemy possible routes of retreat that are within range are taken under fire by the artillery and heavy weapons under regimental control. Mortars, artillery, and second echelon units are displaced forward. Small units attempt to infiltrate the enemy rear. If the enemy succeeds in breaking contact, motorized columns reinforced with tanks and artillery are organized to pursue the enemy on routes parallel to the axis of enemy withdrawal while frontal pressure is continued. The motorized columns cut off the enemy withdrawal from the rear, preferably at defiles. Small units are also employed to infiltrate the enemy position to create roadblocks, delay, and harass the enemy.

170. Termination of Pursuit

Pursuit is terminated only on orders of corps and higher commanders. Normally pursuit is terminated when the enemy has been completely destroyed, when pursuing elements have outdistanced their logistical support or have exposed themselves to being cut off, or the enemy has succeeded in establishing a strong defensive position. When the pursuit ends, rifle units are regrouped and redeployed for the next operation. Artillery, air, tank, and transportation units are brought under centralized control.

Section III. MECHANIZED RIFLE AND TANK UNITS IN THE PURSUIT

171. General

Mechanized rifle and tank units are best suited for pursuit because of their mobility, shock action, and firepower. Tank units block the enemy retreat and attack enemy columns from the flanks. Mechanized rifle units, because of their rifle strength, are also used for other more sustained operations such as the reduction of strong points bypassed by tank units, or for flank protection to block hostile counterattack.

172. Conduct of the Pursuit

a. Mechanized rifle and tank units are organized for the pursuit into balanced forces consisting of medium tanks, heavy tanks, self-propelled artillery mechanized rifle, reconnaissance, and engineer units. Some forces maintain direct pressure on the retreating enemy while the bulk of the pursuing forces moves rapidly on routes parallel to the enemy columns, attempting to cut off and destroy them. At the same time, other forces drive quickly into the hostile rear and attack command posts, destroy supplies, rup-

ture communications, and create panic by surprise thrusts. Strong reserves of tanks, self-propelled artillery, and mechanized rifle units are held in readiness to engage enemy reserves. If separate strong points succeed in resisting direct assaults, they are bypassed with mechanized rifle elements left to contain them until relieved by following rifle units.

b. Strong support is provided by artillery and air units. Long-range artillery is used to bring down harassing and nuclear fires on crossroads and defiles. The supporting air units carry out similar tasks, reconnoiter for and attack advancing enemy reinforcements, and protect the pursuit forces from air attack.

173. Logistics

The impetus of supply is from the rear. Every expedient is employed to keep pursuing units supplied. Mobile supply units and additional transportation units are attached to division. Airdrops and helicopter deliveries are used extensively. Captured supplies are used whenever possible. Local resources are exploited to the maximum.

174. Termination of Pursuit

When pursuit terminates, tank and mechanized rifle units normally revert to reserve and undergo necessary rehabilitation.

CHAPTER 9
ARTILLERY AND AIR SUPPORT IN THE OFFENSIVE

Section I. ARTILLERY

175. General

Aggressor uses large numbers of artillery units to influence the battle. Large numbers of artillery units are maintained in the GHQ reserve to reinforce the artillery of regiments, divisions, corps, armies and army groups. All Aggressor ground delivered missiles are artillery. Antiaircraft artillery units are controlled by the artillery officer of the command.

176. General Employment

a. Aggressor commanders allocate artillery under their control to subordinate units. The artillery units retained are organized into provisional groups for specific tactical missions. On completion of the mission, the artillery units may be reorganized into new provisional groups for different missions. Groups may change composition several times during an operation. Groups vary in size in accordance with the means available and the mission to be performed. A provisional group is commanded by the senior artillery commander of the units composing the group. The headquarters of this commander acts as the group headquarters.

b. Artillery corps, divisions, and brigades are administrative nontactical commands with the exception of the artillery brigade headquarters of the mechanized army and rifle corps. These two artillery headquarters have tactical functions.

c. Artillery planning is detailed and control of fires is centralized to the maximum, consistent with the tactical situation.

177. Army Group

a. The army group allocates to the armies artillery from the army group's artillery corps and other available GHQ artillery units. The army group commander influences the battle by changing the allocations of artillery.

b. A typical army group has 2 antiaircraft missile regiments (SAMMY and SARAH) with 3 battalions each, and 2 artillery missile regiments, each containing 2 battalions, in addition to 3

artillery corps. One artillery missile regiment is armed with the MASHA missile and the other with the MORRIS missile.

c. For the major offensive, the army group with three typical artillery corps and the units described above may initially allocate artillery as follows:

(1) *Army group artillery group.*
- (*a*) Two antiaircraft artillery divisions.
- (*b*) Two antiaircraft missile regiments.
- (*c*) One missile artillery regiment with two battalions (MASHA).

(2) *Each first-echelon rifle army and the mechanized army.*
- (*a*) One antiaircraft artillery division.
- (*b*) One gun artillery division.
- (*c*) One howitzer division.
- (*d*) Two antitank artillery brigades.
- (*e*) One missile regiment (ROCKO).
- (*f*) One missile regiment (RUDY).
- (*g*) One missile battalion (MICKY).
- (*h*) One mixed heavy mortar and rocket launcher brigade.

(3) *Second-echelon rifle army.*
One antiaircraft artillery division.

d. The army group artillery group is subdivided into two subgroups: an antiaircraft subgroup and an artillery missile subgroup.

e. On commitment the second echelon rifle army may be reinforced with the artillery units listed below which are taken from the allocation to first echelon rifle armies.

(1) The equivalent of one gun artillery division.
(2) The equivalent of one howitzer artillery division.
(3) The equivalent of a second antiaircraft artillery division.
(4) The equivalent of one missile regiment (ROCKO).
(5) The equivalent of one missile regiment (RUDY).
(6) The equivalent of one missile battalion (MICKY).
(7) The equivalent of one mixed heavy mortar and rocket launcher brigade.
(8) Two antitank artillery brigades.

178. Rifle Army

a. The rifle army may allocate assigned artillery and attached army group artillery as follows:

(1) *Each first-echelon rifle corps.*
- (*a*) One antitank artillery brigade.

(*b*) Equivalent of one-half antiaircraft artillery division.
(*c*) Equivalent of one-half of a gun artillery division.
(*d*) Equivalent of one-half of a howitzer artillery division.
(*e*) One missile battalion (ROCKO).
(*f*) One missile battalion (RUDY).

(2) *Army artillery group.*
(*a*) One army artillery division.
(*b*) One antitank artillery brigade.
(*c*) One antiaircraft artillery division.
(*d*) One missile battalion (ROCKO).
(*e*) One missile battalion (RUDY).
(*f*) One missile battalion (MICKY).

b. The army artillery group is formed into appropriate subgroups for the following missions:

(1) Long-range cannon artillery fires against deep enemy reserves and installations.
(2) Counterbattery fires against enemy long-range weapons.
(3) Support of the committment of the mechanized army if made in or adjacent to the army zone.
(4) Block areas which have been subjected to nuclear fires.
(5) Antiaircraft protection of vital army installations and routes of communication.
(6) Reinforce fires of first-echelon rifle corps.

c. Control of nuclear fires regardless of disposition is retained by the army group unless specifically delegated to the army or a lower echelon.

d. Allocations of artillery units to rifle corps are changed, as required, to influence the battle. Elements of the army artillery group are used to reinforce the second-echelon corps when committed and to replace rifle corps artillery units rendered ineffective by enemy nuclear fires.

179. Rifle Corps and Mechanized Army

a. The rifle corps and mechanized army allocate the bulk of the assigned and attached artillery to the first-echelon divisions. The rifle corps or mechanized army artillery group usually consists of the corps or mechanized army artillery brigades and sufficient artillery attached from army or army group to permit forming subgroups to accomplish the following missions:

(1) Counterbattery fires.
(2) General support of the first-echelon division.
(3) Antiaircraft defense of vital installations and routes of

communication within the rifle corps or mechanized army zone.

(4) Antitank artillery reserve.

(5) Support of second-echelon divisions when committed.

b. Units of the corps or mechanized army artillery group may be used to replace divisional artillery units made ineffective by enemy fires.

180. Divisions

a. Divisions organize assigned and supporting artillery into groups to accomplish the following missions:

(1) Direct support of specified first-echelon regiments.

(2) General support of all regiments.

(3) Countermortar fires.

(4) Antitank defense in depth.

(5) Antitank artillery reserve.

(6) Support of second-echelon regiments when committed.

(7) Antiaircraft defense of the division zone.

b. A typical division artillery subgroup in direct support of a first-echelon regiment may consist of two or more 120-mm howitzer battalions and a heavy mortar or rocket launcher battalion. Elements of the division artillery group are used to replace regimental artillery units made ineffective by enemy fires. Division may attach artillery battalions to regiments. The regimental commander then controls the artillery battalion and may place it in direct support of a rifle battalion.

c. Division participation in artillery preparations is coordinated by the corps. The artillery of second-echelon divisions usually participates in the artillery preparation.

181. Regiments and Battalions

Regimental and battalion organic artillery units are not formed into groups. They are used for direct close support. Their fires may be coordinated with the fires of supporting division artillery groups. Regiments and battalions form antitank artillery reserves.

182. Artillery Offensive

Aggressor artillery support is based upon the concept that an artillery offensive is the continuous support of rifle elements and tanks with concentrated artillery, rocket, and mortar fire. This concentrated fire precedes rifle elements and tanks from one ob-

jective to the next. Artillery fires are laid down with such weight, volume, and accuracy that the artillery fire itself is an offensive. The artillery offensive, including nuclear fires, is coordinated with the air offensive to destroy or neutralize enemy weapons, units, defense installations, and to support advancing rifle and tank units. It constitutes a definite and distinct part of an Aggressor offensive. The artillery offensive is divided into three phases: preparatory fires, fires supporting the attack, and fires to accompany rifle and tank units during exploitation.

183. Preparatory Fires

a. Preparatory fires are used to destroy enemy defensive installations, disorganize control and observation facilities, disrupt defensive fire systems, and make passages through enemy obstacles. If the preparation does not accomplish these missions, fire for destruction, lasting from a few hours to several days, may be used. Fires for destruction are rarely used when preparatory fires include nuclear fires.

b. Nuclear fires usually immediately precede the nonnuclear fires of the preparation. When atomic fires are used in the preparation, nonnuclear preparatory fires usually do not last more than about 40 minutes. When nuclear fires are not used in the preparation, the length of the preparation may be up to 2 or more hours.

c. Normally, nuclear fires are not delivered against enemy regiments or battle groups in contact, but are usually used deeper in the enemy's rear. Nonnuclear artillery and rockets are used to completely neutralize enemy units in contact with lesser neutralization in depth to the enemy division light artillery positions. Patterns of fire are varied and false preparations are used for deception.

184. Fires Supporting the Attack

a. Prearranged and on-call fires are normally used in support of rifle and armored units after the preparation. Prearranged fires are delivered on call of the supported units. These fires are planned on the basis of the probable action of the supported units at each stage of the battle. This phase of the artillery offensive starts with the assault of rifle and tank units. Normally it includes only those fires required to support the attack through the enemy defensive positions and does not include fires in support of the exploitation.

b. Fires for protection of infantry and tanks through the enemy defenses are planned to give uninterrupted support during the seizure of successive objectives and for protection on capture of the final objective. The planning involves the determination of

times for displacement, and integration of indirect fires of artillery units with the direct fire of accompanying self-propelled guns. Displacements are made so that not more than one-third of the artillery is out of action at any one time. When rifle and tank units have advanced as far as the enemy regimental reserve and main artillery areas, control of artillery is decentralized. Divisional artillery groups supporting regiments come under the control of the supported regiments which control their displacement.

Section II. AIR SUPPORT

185. General

a. Aggressor air armies are used to assist ground forces in accomplishing their missions. Tactical air armies are organized for combat to permit ready attachment to or support of ground forces. Attachment is not normal except in extended pursuit operations.

b. In carrying out its close support mission, the tactical air army also uses fixed and rotary wing aircraft to execute such missions as reconnaissance, artillery observation, transport, communication, and medical evacuation.

186. Employment of Units

a. Fighter units patrol the battle area and enemy forward airfields. They provide close support for ground forces, especially tanks and motorized elements, and execute photographic and visual reconnaissance. As a secondary mission they provide escort to bomber and attack aircraft. In providing close support, fighter units normally maintain air cover over ground troops in the main effort.

b. Bomber units execute medium and low-level bombing attacks in close support of advancing troops and to deliver nuclear fires. Bombers are employed singly or in groups in horizontal, glide, or dive-bombing attacks in daylight and in horizontal or glide-bombing attacks at night.

c. Attack units are used against enemy forward areas in cooperation with rifle and armored units. Attack aircraft are used for low-level close support and deliver machinegun fire, rockets, light bombs, and automatic light-cannon fire. Attack aircraft also perform visual and photographic reconnaissance.

187. Preparation for Support of an Offensive

a. Preparation for an offensive may be divided into four phases:

(1) Buildup of aircraft and supplies. Operations are cut to a

minimum, but reconnaissance is continued as well as diversionary attacks on adjacent fronts. Fighter effort is devoted to blocking enemy air attacks.

(2) Bomber and attack sorties are used against the enemy to a depth of 400 miles or more. Reconnaissance is increased. Fighters operate against enemy air in greater intensity.

(3) Transition from operations against the enemy rear to attacks against targets in the immediate battle area. Attack aircraft and fighters step up the tempo of their operations.

(4) Attack and bomber operations are reduced while fighters intensify their efforts against enemy air in order to conceal the final preparations for the offensive.

b. Planning of air support is started as soon as the concept of the offensive is known. Command of air units is exercised by the air army commander throughout the period of preparation. After the offensive starts, command is decentralized to the extent necessary to insure full and immediate cooperation between ground units and the supporting air units. The operational plans of the air army are not drawn up by its commander, but by the army group commander. The army group and air army staffs work closely together in preparing the plans and the necessary orders. Commanders of armies and corps having air army units in support assign missions to the supporting air units. The plans for air support are prepared by the ground forces staff in conjunction with the air staff.

188. Air-Ground Control System

Air-ground cooperation is insured by having the supporting air commander direct his operations from the command post of the supported ground unit or by having liaison officers from the supporting air unit with the supported ground unit. Joint air-ground control posts are located at all battalion and higher command posts of the supported unit. On occasion air-ground control posts may be at rifle or tank companies. Air-ground control posts control air attacks on targets within their sectors and may designate new targets in case of changes in the tactical situation.

189. Air Support of the Preparation

Before the firing of the preparation, fighter aircraft reduce the effectiveness of the enemy air effort so that it cannot interfere with the air assault that accompanies the artillery preparation. During the artillery preparatory fire, the air army attacks targets which

are out of artillery range or cannot be observed from the ground. Aircraft concentrate on the enemy's frontline immediately prior to rifle and armored assaults. The air attack, supplementing the artillery fire, is of short duration. Simultaneously, specially detailed artillery batteries neutralize enemy antiaircraft guns.

190. Air Support of the Attack

a. Once the attack is launched, bombers attack rear area installations; attack aircraft execute strikes against targets whose destruction or neutralization assists ground assault units, and fighters supplement the bombers and attack aircraft and protect both air and ground units from hostile air attack. Ground units call for support through liaison officers and air-ground control posts. As the attack progresses into the depths of the hostile defensive system, small formations of planes remain constantly in the air to attack, on their own initiative or on instructions from the ground forces, those targets which impede the attack of the rifle and armored units.

b. As in pursuit operations, the available air strength is used for attacks on the retreating forces and on advancing enemy reserves. The air effort adds impetus to the pursuit and helps prevent the establishment of new enemy defensive positions.

CHAPTER 10
THE DEFENSE

Section I. GENERAL

191. Concept of the Defense

The defense consists of a series of defensive areas or strong points located laterally and in great depth. These defensive areas are so disposed that the attacker is forced to attack echeloned strong points, thus reducing his momentum and strength. When the attacker is extended and weakened by well-planned defenses, Aggressor initiates counteroffensive operations. Defensive battles are won only by resumption of the initiative and destruction of the enemy. The counteroffensive is normally supported by nuclear fires. Aggressor takes up the defensive when forced to do so, in order to gain time, or to economize in one area in order to provide more forces for another area.

192. Types of Defense

The three usual types of defense are:

a. Decentralized Position Defense. This type of defense is designed to hold essential terrain and at the same time achieve passive defense, by dispersion, against enemy nuclear weapons. When the enemy does not have or use nuclear weapons, the decentralized position defense is also used when terrain must be held, but the forces available are not adequate to permit organization of a defense based on mutually supporting strong points.

b. Centralized Position Defense. The centralized position defense is employed only when the enemy does not have or use nuclear weapons, terrain must be held, and adequate forces are available. Mutually supporting strong points are placed on the principal avenues of approach leading to critical terrain features. Secondary avenues of approach are covered by fire and obstacles.

c. Successive Position Defense. The purpose of this type of defense is to gain time and to conserve own forces at the expense of loss of terrain. A successive position defense is a series of delaying actions fought along previously prepared defense lines in combination with shallow counterattacks.

193. Organization of the Defense

In the organization of any defensive, emphasis is placed on protection of troops and material from the effects of enemy nuclear fires. The influence of terrain on effects of nuclear fires is considered in selecting the defensive areas. The entire defensive area is as heavily fortified as time permits, with priority given to the forward defensive installations. Obstacle belts forward and within the position, are constructed in order to hinder the enemy advance, canalize him into areas favorable to the defender, or cause him to mass into profitable nuclear targets.

194. Organization of the Centralized and Decentralized Position Defenses

The centralized and decentralized position defenses are based on a series of defensive zones designed to add depth and flexibility to the defense. Normally these zones consist of a security zone, a main defensive zone, a second defense zone, and a rear defense zone. Forces in the security zone delay the enemy. Forces in the main defensive zone stop the enemy. Forces in the second defensive zone either counterattack the enemy if he breaks through the main defensive zone or contain him. Forces in the rear defensive zone strike the enemy with a major counterattack if the second defensive zone is penetrated or they launch a counteroffensive when the enemy offensive has been stopped or slowed.

195. Planning the Defense

The rifle army normally prescribes the general location of the forward edge of the main defense zone and the limits of the corps zone of defense. The rifle corps designates the more important areas in the main defensive zone to be defended, prescribes the antitank defense in depth and counterattack plans. The rifle corps also plans for possible withdrawal of forces from forward positions in the main defensive zone when close-in nuclear fires are used. Division commanders select the exact trace of the forward edge of the main defensive zone. Division defense plans include the organization of the defense, allocation and use of artillery, antitank defense, use of air support, and priorities for the preparation of defensive works.

196. Conduct of the Defense

a. In the conduct of the decentralized or centralized position defenses, Aggressor habitually constructs supplementary and alternate defensive positions. These positions are so sited that they command the avenues of approach to critical terrain, to

thwart the enemy target acquisition effort. In the decentralized position defense Aggressor frequently changes occupied defensive positions. Under conditions of active atomic warfare small forces are left in the previously occupied positions to simulate normal activity. Movements to alternate or supplementary positions are made at night or during conditions of reduced visibility.

b. If it is known or believed that the enemy will fire a nuclear preparation on the main defensive zone, troops in the threatened area may, on authority of the army commander, withdraw temporarily. A strong, well dug in covering force is left in place to conceal the withdrawal. The defensive position is reoccupied at the earliest possible time. The survivors of units attacked with nuclear fires continue the defense until properly relieved. Care of casualties is subordinated to continuation of the defense. Units on the flanks of forces subjected to enemy nuclearfires, increase flank protection in that direction and prepare to attack the advancing enemy forces from the flank.

c. In all defense operations, close contact with the enemy is stressed. All units are alert for any signs of enemy withdrawal as a possible indication of preparation for close-in nuclear fires. Close contact with the enemy is considered excellent protection from nuclear attack.

197. Nuclear Fires in the Defense

In the defense nuclear fires are primarily used for—

a. Destruction of enemy nuclear delivery means that cannot be otherwise destroyed.

b. Counterpreparations.

c. Support of counterattacks.

d. Elimination of penetrations if troop safety permits.

e. Denial of areas to the enemy by use of surface bursts.

198. Counterattacks

Major counterattacks are executed primarily by mechanized rifle and tank units under the control of either the rifle corps or the rifle army. Counterattacks, if necessary, cross radioactive areas rapidly. Greater troop safety risks are accepted to insure reduction of serious penetrations. Counterattacks against deep and wide penetrations may be made in conjunction with nuclear fires and small airborne assaults. If airborne units are used they are dropped on the enemy side of the area subjected to nuclear fires, as an enveloping force to seal off the penetration and thus permit destruction of the surrounded enemy.

199. General Withdrawals

a. Aggressor rarely executes general withdrawals. When retrograde action is required, Aggressor uses the successive position defense wherever possible. When a general withdrawal is required, it is planned in as much detail as time permits. Demolition and scorched earth plans are prepared for all withdrawals. Withdrawals normally take place on a broad front in darkness or under cover of smoke and artillery fires including nuclear fires. Limited armored counterattacks may also precede withdrawals.

b. The first units to withdraw are rear services units and army group artillery. These units usually move back under cover of darkness 1 or 2 days before the withdrawal of the forward corps. The disengagement of the corps normally takes place from rear to front in a manner generally similar to that used by U.S. forces.

c. In large-scale withdrawals, rear guards are normally formed from either army troops or division reserves. Rear guards normally consist of motorized rifle units reinforced with tanks, engineers, and artillery. Rear guards normally occupy position in rear of the main forces and cover their withdrawal. As the rear guard withdraws, it destroys bridges, executes demolitions, blocks side roads and parallel routes, and may emplace nuclear demolitions.

Section II. THE DECENTRALIZED POSITION DEFENSE

200. General

a. The decentralized position defense is based on the rifle divisions of the rifle corps destroying the enemy from positions in a heavily fortified area. If the enemy penetrates this area, his attack will be slowed by the continuing resistance of the rifle divisions and nuclear fires. Large mobile reserves of tank and mechanized rifle divisions and units under the rifle army or army group counterattack and destroy the weakened and exhausted enemy. These counterattacks are supported by nuclear fires.

b. The decentralized position defense consists of a series of strong points manned by reinforced rifle battalions or companies and is characterized by—

(1) Strong points normally located too far apart to be mutually supporting.
(2) Self-sufficient strong points with artillery, mortar, and tank support under control of local commanders.
(3) Large mobile reserves at corps and army level.

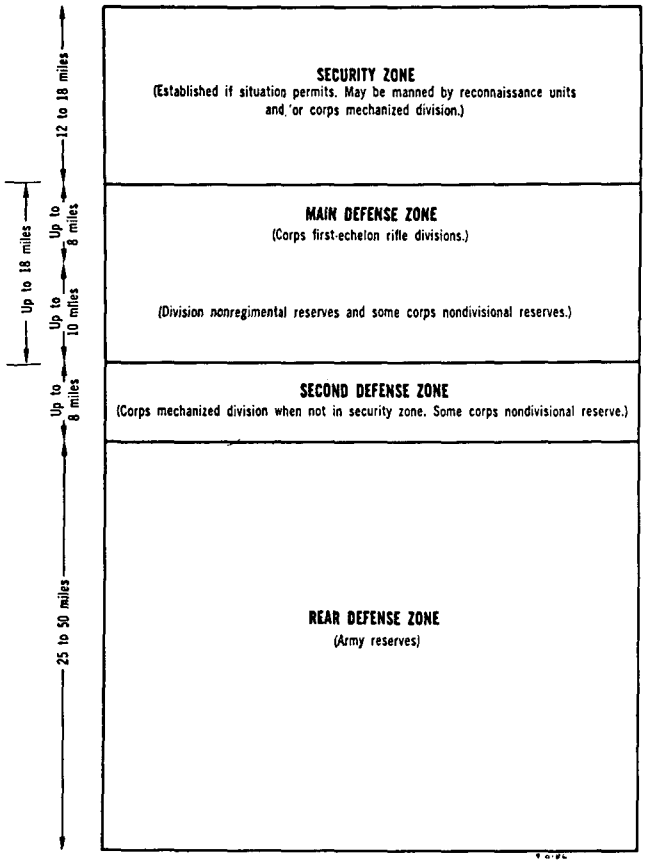


Figure 50. Schematic zone organization of decentralized position defense (not to scale).

(4) Communications, primarily by radio.
(5) Small counterattacks by local reserves executed on orders of strong point commanders.

201. Security Zone

The rifle corps, if possible, establishes a security zone forward of the main defense zone. This security zone is about 12 to 18 miles deep. This is considered deep enough to prevent the enemy from delivering fire on the main and second defense zones with divisional weapons. The security zone is manned by reconnaissance and mechanized units reinforced with artillery, engineers, and other appropriate means. Security zone forces halt the enemy or delay him by forcing him to deploy and prevent enemy reconnaissance units from reaching the main defense zone. Close contact with the enemy is maintained as a protection against enemy nuclear fires.

202. Main Defense Zone

This zone is the bulwark of the defense. It is selected to take advantage of natural obstacles and terrain that afford the maximum passive defense against atomic attack. It is normally located behind a natural obstacle and is designed to stop a hostile attack and destroy the attacking forces. The zone is up to 18 miles deep. About the first 8 miles is manned by the rifle divisions comprising the first echelon of the rifle corps. Behind the rifle divisions, within the main defensive zone, are elements of the corps artillery group and corps general troop reserves, division main and alternate command posts, division antiaircraft positions, division engineer, and antiairborne reserves.

203. Second Defense Zone

The second defense zone, up to 8 miles deep, is located directly to the rear of the main defense zone and usually has prepared, but unoccupied, defensive positions in its forward area. The mechanized rifle division is usually located in the second defense zone on completion of its security zone mission or if a security zone is not established. The mechanized rifle division either counterattacks or occupies the prepared positions in the event the enemy breaks through the main defensive zone. The corps main and alternate command posts, the corps tank, antitank, engineer, antiairborne units, and reserves are located in the second defense zone. Elements of the army artillery group are also located in the second defense zone.

204. Rear Defense Zone

The rear defense zone, directly in rear of the second defense zone, is about 25 to 50 miles deep. The army reserves are located in this zone.

205. Army Group

The area defended by a typical army group may be up to 120 miles deep and from 125 to 300 miles wide. The width of the area depends on the defensive strength of the area of operations and the composition of the army group. The army group normally defends in two echelons. The first echelon consists of 2 or 3 rifle armies. The second echelon usually consists of the mechanized army, GHQ units available to the army group and possibly one rifle army. The second echelon is usually used for counteroffensives. The army group second echelon is usually located well to the rear of the rear defense zone and is widely dispersed.

Section III. RIFLE ARMY IN DECENTRALIZED POSITION DEFENSE

206. Formation for the Defense

a. The rifle army normally defends in two echelons. The first echelon usually consists of two rifle corps. The second echelon normally consists of one rifle corps, army troops, and GHQ units made available by the army group. In the decentralized position defense, the rifle army is often reinforced with one or more separate mechanized and tank divisions, particularly if there is no rifle corps in the army second echelon. If the assigned area is very wide, the rifle army may defend with all rifle corps in the first echelon. In that case the second echelon consists of army troops and units made available by the army group.

b. The typical rifle army can defend an area about 65 to 100 miles wide and about 50 miles deep. When the width of the assigned defense area is considerably more than 65 miles, the typical rifle army will usually defend with all corps in the first echelon.

207. Organization of the Defense Area

a. The main defense zone, and the security zone if it can be established, are organized by rifle corps of the first echelon. The rifle army second echelon organizes the rear defensive zone. This zone has 2 or 3 lines of engineer prepared positions and several antitank strongpoints. These positions are occupied only when the enemy penetrates the second zone of defense and the army second echelon is unable to carry out counterattack plans.

b. When a rifle corps is in the rifle army second echelon, the mechanized rifle division and one rifle division are located in dispersed and centrally located assembly areas in the forward part of the rear defense zone. The remaining rifle division is located in dispersed assembly areas in the rear portion of the zone.

208. Counterattacks

Army counterattacks are usually launched by the rifle corps in the army second echelon. When the rifle army does not have a rifle corps in the second echelon, the separate tank or mechanized rifle divisions made available from army group are used for counterattack. If airborne units are available to the field army, they may be used to support the counterattack as described in paragraph 198. Counterattacks are executed in the same general manner as an attack in a major offensive.

Section IV. RIFLE CORPS IN DECENTRALIZED POSITION DEFENSE

209. Formation for the Defense

The rifle corps normally defends in two echelons. The first echelon usually consists of two rifle divisions. The second echelon usually consists of the mechanized rifle division. The formation of the rifle corps for defense depends on the width and defensive strength of the assigned defense area and the means available. If assigned a very wide defense area, the rifle corps may use 2 rifle divisions and 2 mechanized rifle regiments in the first echelon and the mechanized rifle division, less 2 mechanized rifle regiments, in the second echelon. A rifle corps rarely defends in a three-echelon formation.

210. Width and Depth of Defense Areas

The typical rifle corps can defend an area about 20 to 32 miles wide and about 18 to 36 miles deep. If a security zone is not established, the depth of a rifle corps defense area is usually not more than about 18 miles. If the width of the assigned defense area is more than 32 miles, the strength of the corps first echelon is usually greater than 2 rifle divisions.

211. Organization for the Defense

a. The security zone is usually manned by the corps mechanized rifle division. On completion of its mission in the security zone the mechanized rifle division withdraws to the second defensive zone. On withdrawing from the security zone, the mechanized rifle division often leaves stay-behind elements to execute intelligence and sabotage missions. Stay-behind elements attempt to locate enemy nuclear delivery means and to determine enemy attack formations and time of attack.

b. The rifle corps defends both the main defense zone and the second defense zone. The rifle divisions of the corps first echelon defend the main defense zone. The second defense zone is manned by the mechanized rifle division of the corps second echelon when not employed in the security zone.

212. Reserves

a. In addition to the second echelon forces, the rifle corps forms a general troop reserve. Both the rifle corps and rifle division form antiairborne reserves, engineer reserves, antitank, and artillery reserves. The rifle corps general troop reserve may consist of a rifle regiment from one of the first-echelon rifle divisions.

The general troop reserve is used to replace rifle units destroyed by the enemy, to protect the flanks, to participate in the counterattack, and for antiguerilla and antiairborne operations.

b. Antiairborne reserves consist of tanks and artillery. This reserve is small and is used to contain an airdrop only long enough for other forces to be committed against the airborne forces. Antitank artillery reserves are held in readiness to move quickly to any threatened area. Artillery reserves are those elements of corps and division artillery groups designated to replace the artillery of subordinate units rendered ineffective or to deliver fires to deny the enemy use of friendly areas subjected to nuclear fires. Engineer reserves are very small consisting of 1 or 2 companies. They are used primarily for emergency construction or removal of obstacles.

213. Organization of the Second Defensive Zone

The second defense zone proper has engineer prepared positions in the forward portion. These positions are normally unoccupied. The mechanized rifle division is located in or just to the front of this zone in several dispersed but centrally located assembly areas from which it can counterattack in a number of directions. The mechanized rifle division occupies the prepared defensive positions only when forced to by enemy action. The mechanized rifle division is also prepared to counterattack if necessary, in the adjacent corps zones. The corps artillery group is also located in or to the front of the second defense zone. Part of this group will be the artillery reserve. Elements of the field army artillery group and the corps main and alternate command posts may also be located in this zone.

214. Antitank Defenses

Protection against armor attack is emphasized because of the increased dispersion in the decentralized position defense. Strong antitank defenses in depth are made part of all defensive installations. Trenches, firing positions, belts of antitank obstacles, and antitank strongpoints covering likely avenues of approach are prepared. Antitank artillery reserves are held in readiness to move quickly to threatened areas, particularly likely avenues of approach for enemy armor. Antiaircraft artillery guns frequently are deployed with equal consideration for air defense and antitank missions.

215. Conduct of the Defense

a. As the enemy approaches the main defense position, he is

subjected to continuous heavy fires from all available means. Reconnaissance is intensified to locate enemy nuclear delivery means. Those that are located are taken under fire by appropriate weapons without delay. Troops are alerted to occupy prepared protective positions to minimize the effects of nuclear fires delivered by enemy divisional weapons. The intelligence effort concentrates on determining enemy formations, locations of attack positions, and, if possible, the time of the enemy attack.

b. Counterpreparatory fires are readied. Counterpreparations are fired on the order of the corps commander. Authority to fire a counterpreparation may be delegated to division commanders. Nuclear fires, as available, are included in the counterpreparation. Preferred targets for nuclear counterpreparatory fires are enemy units in assembly areas and nuclear delivery systems.

c. If the enemy should penetrate the main defensive positions of the first-echelon rifle divisions, the penetration is blocked. Some units may be withdrawn, if possible, to permit use of close-in nuclear fires. The mechanized division may be shifted in anticipation of a counterattack.

216. Corps Counterattack

a. The rifle corps counterattack is usually carried out by the mechanized rifle division. If the corps general troop reserve has not been previously committed, it may also be used in the counterattack. Counterattacks are directed at the flank and rear of enemy penetrations. Nuclear fires are used on deep penetrations. If necessary, the counterattack forces pass through radiologically contaminated areas to reach the enemy.

b. Wide use is made of armored carriers in order to speed the counterattack. Normally rifle units dismount from armored carriers about 500 yards from the line of deployment. If the enemy penetration has been neutralized by nuclear fires, the rifle units may advance through the penetration firing from their armored carriers. This type of carrier-borne counterattack is continued until stopped by the enemy or until the final objective is gained.

c. If the counterattack fails, Aggressor withdraws his forces from the main defense zone to take up positions in the second defense zone. From the rear zone of defense, the rifle army second echelon launches a counterattack to regain the lost territory. All withdrawals are protected by nuclear fires and counterattacks by elements of the army second echelon.

Section V. RIFLE DIVISION IN DECENTRALIZED POSITION DEFENSE

217. Formation for the Defense

The rifle division in the corps first echelon normally defends in two echelons. The first echelon usually consists of two rifle regiments reinforced with elements of the division medium tank regiment. The second echelon usually consists of one rifle regiment also reinforced with elements of the medium tank regiment. Usually two or three companies of the medium tank regiment are used to reinforce the rifle regiments. The remainder of the medium tank regiment is retained under division control as the division tank reserve. The formation of the rifle division for the defense depends on the width and defensive strength of the assigned defense area. If assigned a very wide defense area, the rifle division may use all rifle regiments in the first echelon with a reinforced rifle battalion in the second echelon. In active atomic warfare the rifle division rarely uses a three echelon defense formation.

218. Width and Depth of Defense Areas

The rifle division can defend an area about 10 to 16 miles wide and about 8 miles deep. If the width of the assigned area is more than 16 miles, the division may defend with more than 2 reinforced rifle regiments in the first echelon.

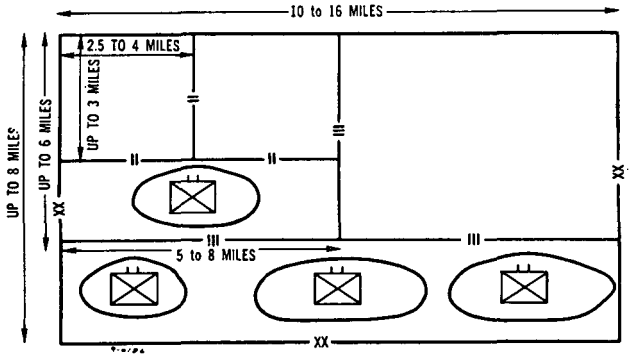


Figure 51. Schematic rifle division defense sector, decentralized position defense.

219. Organization for the Defense

a. The rifle division normally defends the forward 8 miles of the main defense zone. The division first-echelon regiments defend up to about the forward 6 miles of the division defense area.

Regiments defending the most dangerous avenues of approach are usually assigned relatively narrower sectors. The reinforced second echelon regiment occupies an area across the division front about 2 to 3 miles in depth and about 6 miles from the forward trace of the main defensive zone.

b. All rifle regiments organize the defense of their areas on the basis of battalion combined arms team defensive areas. Company-size strong points may be established. Provision is made for their withdrawal into rifle battalion defensive areas if required by the situation. The second echelon rarely occupies a regimental assembly area. It defends its area by organizing three battalion combined arms team defensive areas across the division front. These defensive areas of the second echelon are sited to protect critical terrain and control avenues of approach leading from the areas occupied by the first-echelon regiments.

c. First-echelon rifle regiments establish security forces forward of the main defense zone, within the security zone, along a general line designated by the rifle division. This line, known as the battle outpost line, is normally located 1,000 to 3,000 yards in front of the forward battalion defense areas. The battle outpost line screens the main defense zone after the withdrawal of the security zone forces. While security zone forces are forward of the main defense zone, the battle outpost prevents surprise and provides a counterreconnaissance screen. As a deception measure, the battle outpost line may be strong in front of dummy positions and weak in front of the actual battalion defense areas. The strength of the battle outpost line depends on the terrain, estimated enemy strength, and available means. Normally, each forward battalion defense area sends out about a reinforced platoon to man its part of the battle outpost line.

220. Division Reserves

The rifle division also forms antiairborne, engineer, antitank, and artillery reserves similar to those formed by the rifle corps. The division antitank reserve may consist of up to one regiment of antitank artillery. The division engineer reserve may consist of 1 or 2 engineer companies. For the location of artillery reserves see paragraph 221*b*.

221. Organization of the Main Defense Zone

a. The division portion of the main zone is as heavily fortified as time permits. Obstacles of all types and underground shelters are constructed with engineer help and supervision. Maximum

use is made of local civilian labor, construction equipment, and materiel.

b. The division main and alternate command posts, division antiaircraft gun positions, corps antitank reserve, corps artillery reserve, corps tank reserve, corps general troop reserve, switch lines, obstacles, and antitank strong points are located in the main defense zone behind the areas occupied by the first and second echelon regiments. Switch lines are prepared and defense positions are located to force a penetrating enemy into either unfavorable terrain and concentrations or to split his forces into unfavorable terrain where he can be destroyed by preplanned fires.

c. The division tank reserve, antitank reserve, engineer reserve, and command posts of first-echelon regiments are usually located in the area between the first-echelon regiments and the second-echelon regiment. In this area are also located the light caliber regimental and division artillery groups.

222. Conduct of the Defense

a. The rifle division defends in place. Except for the ejection of small penetrations not reduced by fire, counterattacks are made by the rifle corps second-echelon. The division tank reserve, reinforced is used for ejecting small penetrations. The division second echelon blocks enemy penetrations which have ruptured division first echelon positions.

b. Should troops be subjected to an enemy nuclear attack, the survivors continue the defense until properly relieved. Care of casualties is subordinated to continuation of the defense. If it is known or believed that the enemy will fire a nuclear preparation on the first echelon of the division, the troops in that area may withdraw temporarily, on authority of the rifle army commander. A strong rear guard is left in place to conceal the departure of the main force. The defensive position is reoccupied at the earliest possible time.

Section VI. FIRST-ECHELON RIFLE REGIMENT IN DECENTRALIZED POSITION DEFENSE

223. Formation for the Defense

The rifle regiment in the division first echelon usually defends in two echelons. The first echelon usually consists of two reinforced rifle battalions. The second echelon usually consists of the third rifle battalion reinforced. Rifle battalions are reinforced

with tanks, self-propelled guns, antitank artillery, and antiaircraft artillery available to the rifle regiment. If assigned a very wide area, the rifle regiment may defend with all rifle battalions in the first echelon and a reinforced rifle company in the second echelon. In active atomic warfare, the rifle regiment rarely uses a three-echelon formation.

224. Width and Depth of Defense Areas

A rifle regiment in the division first echelon usually defends an area 5 to 8 miles wide and up to about 6 miles deep. If the width of the assigned area is more than 8 miles, the regiment may defend with more than 2 reinforced rifle battalions in the first echelon.

225. Organization for the Defense

a. Figure 51 illustrates a typical defense organization by the rifle regiment in the division first echelon.

b. Battalion strong points are located on terrain features covering important enemy avenues of approach. The strong points are usually not mutually supporting but are located so as to be able to deliver flanking fire on enemy units using those avenues of approach into the defensive area. The battalion strong point does not occupy the entire area for which the battalion is responsible. Unoccupied areas are controlled by use of fires, patrols, and obstacles. Each unit is responsible for the gap on its left.

c. The regimental defense area is as heavily fortified as time permits. Obstacles in the form of barbed wire entanglements of various kinds, electrified wire, antitank and antipersonnel minefield wire, antitank ditches, abatis, prepared demolitions, and other obstacles to the movement of enemy armor and infantry are established to the front and flanks as well as inside battalion defense areas. Flamethrowers and smoke generators are placed to cover the approaches to the regimental area.

226. Rifle Regiment Reserves

The rifle regiment organizes reserves on a smaller scale, similar to those of the rifle division described in paragraph 220.

227. Separate Companies of the Rifle Regiment

a. Mortar Company. Platoons of the company are normally attached to rifle battalions. Missions assigned to the mortar battery include—

(1) Attack of enemy personnel concentrating for the attack.

(2) Smoke missions and neutralization of enemy weapons.

(3) Participation in counterpreparation and firing normal barrages.

(4) Support of battle outpost from supplementary positions.

(5) Fires on enemy penetrations.

b. Antiaircraft Battalion. The employment of this battalion in the defense is similar to the employment in the offense (par. 143*c*).

c. Self-Propelled Gun Company. The guns of this company are normally attached to the rifle battalions. The self-propelled guns may be employed as roving guns or dug in as armored pillboxes.

d. Antitank Company. Platoons are usually attached to the rifle battalions. At least one reinforced platoon is retained as the regimental antitank reserve.

e. Recoilless Rifle Company. The employment of this company in the defense is similar to the employment in the offense (par. 143*e*).

228. Conduct of the Defense

a. The rifle regiment begins its defense when the enemy makes contact with the battle outposts. Prior to this time the enemy will have been subjected to concentrations of nuclear fires, long-range artillery fire, and air strikes while traversing defiles; harassment and delay by units of the security zone; and air strikes and artillery and mortar concentrations, including nuclear fires, while in assembly areas. As hostile elements move within range, combat outposts take them under fire of mortars, small arms, and machine guns. Artillery places creeping barrages on the advancing enemy and covers the withdrawal of the combat outposts as the latter are forced back.

b. Artillery barrages are placed on the enemy as he reaches a line about 400 yards from the forward battalion defense areas. Here, too, the enemy is brought under direct antitank, artillery gunfire as he encounters belts of antitank mines. If the enemy succeeds in penetrating the main defense zone, all weapons in range keep him under fire. Hostile infantry are separated from tanks, if possible, and tanks are taken under fire by antitank guns, self-propelled guns, and at times by antiaircraft guns, and even other artillery in direct fire roles. Hostile penetrations of the forward companies of rifle battalion defense areas are blocked by rear companies.

c. Minor penetrations of the rifle regimental sectors are counterattacked by the reinforced division tank reserve. If these

counterattacks fail to stop the enemy advance, permission may be granted to threatened units to withdraw to alternate positions.

Section VII. RIFLE BATTALION AND COMPANY IN DECENTRALIZED POSITION DEFENSE

229. Formation for the Defense

The battalion defense is based on the battalion combined arms team defense area. If required by the terrain and the situation, company combined arms team defense areas may be organized. Provision is made for the withdrawal of these company combined arms teams into the battalion defense area if required. The rifle battalion usually defends in two echelons. The first echelon usually consists of two rifle companies. The second echelon usually consists of the third rifle company. A three-echelon formation is rarely used. The formation of the rifle battalion depends on the width and defensive strength of the assigned defense area. If assigned a very wide area, the rifle battalion may defend with all rifle companies in the first echelon and a reinforced rifle platoon in the second echelon. The rifle company formation for the defense is similar to that of the rifle battalion.

230. Width and Depth of Defense Areas

a. A rifle battalion usually defends an area about 2.5 to 4 miles wide and up to about 3 miles deep. If the width of the assigned area is more than 4 miles, more than 2 rifle companies are usually used in the battalion first echelon. The area *actually* occupied by a battalion defense area with 2 companies in the first echelon may be only 2 miles wide and up to about 1 mile deep.

b. A rifle company usually occupies an area about 1 or 2 miles wide and up to about ½ mile deep.

231. Organization for the Defense

a. Detailed construction of defensive fortifications is undertaken in each battalion position. Normally three main lines of trenches are dug. Mechanical means are frequently used. The first 2 trenches are approximately 450 yards apart on a forward slope and are occupied by the 2 first-echelon rifle companies reinforced with the bulk of the heavy machineguns and recoilless antitank weapons available to the battalion. Some tanks, self-propelled guns, mortars, and artillery batteries may be assigned those units for direct support. A third trench, approximately 900 yards behind the second trench, and frequently on a reverse slope,

is occupied by the second-echelon rifle company. Fixed machinegun and antitank gun emplacements are provided to the front of the first trench so those weapons can fire along the forward edge of the defense area. Portions of the first trench are provided with overhead cover. Usually, such protection is located about every 45 yards along the trace of the trench. Alternate and supplementary positions are prepared as time permits.

b. Rifle companies are usually organized with two platoons in the first trench and the third platoon in the second trench. A secondary trench a short distance behind each main trench is occupied by the third squad of each platoon, the platoon command post, heavy machineguns, and recoilless antitank weapons. All platoon trenches are connected by communication trenches as time permits. A communication trench for each company leads back to the third main trench which also contains the battalion command post. The battalion, in turn, has similar communication trenches leading back to the regimental command post in the regimental second-echelon position.

c. Weapons are placed so they can cover the entire company front and interlock with fires of adjacent companies. The third main trench does not support the first two trenches with any fires except mortar fires. If the enemy breaks through the second trench, troops occupying the third trench bring the enemy under fire while he is in the process of reorganizing to continue the attack. The gaps between battalions are covered with heavy artillery and antitank gunfire and heavy belts of obstacles designed to force the enemy into those areas covered by small-arms fire.

232. Rifle Battalion Reserves

The rifle battalion organizes an antitank reserve similar to that of the rifle regiment (par. 227*d*).

233. Separate Companies of the Rifle Battalion

a. Machinegun Company. The machinegun platoons are normally attached to the rifle companies. The antiaircraft machinegun platoon is normally employed under battalion control to protect the most critical installations or areas in the battalion defense area. One or more machinegun platoons may be assigned primary antiaircraft missions depending on the enemy situation and air threat.

b. Mortar Company. The mortar company is normally employed for general support of the rifle companies. Platoons may

be attached to the rifle companies if the defense area is too wide to permit effective support of the battalion from one area.

c. Antitank Company. The platoons of the company are usually attached to the rifle companies. One platoon, however, is normally retained under battalion control as part of the battalion antitank reserve.

234. Conduct of the Defense

a. The battalion conduct of the defense is generally like that of the rifle regiment (par. 225).

b. The rifle battalion, under cover of darkness or reduced visibility, frequently moves to supplementary defense areas to thwart enemy target acquisition. Small forces are left in the former positions to simulate normal activity.

Section VIII. TANK AND MECHANIZED RIFLE DIVISIONS IN THE DECENTRALIZED POSITION DEFENSE

235. General

Tank and mechanized rifle divisions are normally used for the counterattack. The mechanized rifle division is used in the security zone and may, on rare occasions, be used in the main defense zone when the rifle corps has an exceptionally wide front. The tank division is not normally used for defense in position. When intended for counterattack roles, mechanized rifle and tank divisions are located in or near the probable areas of hostile penetration. Counterattacks are carefully planned and coordinated and are executed in accordance with the principles of the offensive.

236. Mechanized Rifle Division in the Corps First Echelon

If the mechanized rifle division is employed in the corps first echelon, it usually defends in the same general manner as a rifle division. The medium tank battalions of the mechanized rifle regiments are normally in the regimental second echelon. The mechanized rifle division second echelon usually includes the medium tank and heavy tank regiments. Unlike the rifle division, the mechanized rifle division second echelon may be employed for the counterattack.

Section IX. CENTRALIZED POSITION DEFENSE

237. General

a. The centralized position defense is used *only under conditions of nonatomic warfare* where terrain features must be held and

adequate forces are available to permit mutual support between strong points or defense areas. This type of defense is characterized by—

(1) Relatively small division reserves.

(2) Centralized control of artillery and air support.

(3) Extensive use of wire communications.

b. The centralized position defense is organized and conducted generally as the decentralized position defense with these exceptions:

(1) Frontages and depths of defense areas at all echelons, except army group, are reduced. The depth of the army group area is unchanged.

(2) At division level, the second echelon is used for the counterattack.

238. Defense Zones

a. Aggressor uses a characteristic four zone defense system in the centralized position defense. Depths of zones are—

Security zone	6 to 12 miles
Main defense zone	6 to 10 miles
Second defense zone	6 to 10 miles
Rear defense zone	10 to 15 miles

b. The main defense zone, second defense zone, and the rear defense zone contain prepared positions about 6,000 yards deep in the forward portion of the respective zones.

239. Ideal Frontages and Depths of Typical Commands

Command	*Frontage*	*Depth*
Rifle company	400—800 yards	400—800 yards
Rifle battalion	1000—2,000 yards	1,000—2,000 yards
Rifle regiment	3,000—6,000 yards	2,000—4,000 yards
Rifle division	5—7 miles	4 miles
Rifle corps	10—14 miles	12—20 miles
Rifle army	20—42 miles	22—35 miles

Section X. DEFENSE IN SUCCESSIVE POSITIONS

240. General

a. The aggressor defense in successive positions is comparable to the U. S. concept of delaying action. It consists of a series of generally parallel lines of defense over which delaying actions are fought by minimum forces. The successive position defense is characterized by—

(1) Shallow defensive areas normally located too far apart to be mutually supporting.
(2) Decentralization in control of firepower with maximum firepower in the leading echelons.
(3) Relatively large division reserve.
(4) Maximum use of combat deception measures.
(5) Maximum use of improvised obstacles.
(6) Withdrawal before becoming so heavily engaged that troops cannot be extricated even if supported by nuclear fires.
(7) Maximum use of limited armored counterattacks to permit and cover disengagements.
(8) Use of surface burst nuclear weapons.

b. In the defense on successive positions mechanized rifle and tank divisions are usually assigned defensive zones of action.

241. Use of Nuclear Fires

a. Nuclear fires are used extensively for—
(1) Attack of enemy reserves, particularly armored units.
(2) Interdiction of defiles. Prepositioned weapons are frequently used.
(3) Destruction of nuclear delivery systems.
(4) Destruction of communication centers.
(5) Extrication of forces that are closely engaged (small yield weapons).
(6) Denial of areas to the enemy by use of surface bursts.

b. Control of small yield nuclear fires and weapons is often decentralized to divisions.

242. Obstacles

Maximum use is made of all types of obstacles. When chemical warfare is started, extensive use is made of toxic persistent gases. Forward of a line of defense and between defense areas, all roads and tank approaches are mined or otherwise blocked with obstacles. Minefields containing both antitank and antipersonnel mines and defensive wire are placed along the immediate front and on both flanks of each battalion defense area. Between lines of defense, all roads and tank approaches are also mined. Lanes are marked through these minefields to permit quick withdrawal of friendly units.

243. Organization for the Defense in Successive Positions

a. All commands are generally organized into two echelons. Strong points and defense areas are smaller and further apart.

The basic defense element is the motorized reinforced rifle battalion or the reinforced mechanized rifle battalion.

b. Commands occupy two successive lines of defense simultaneously. First-echelon forces on the forward line are deployed to cover the widest possible front and to deliver the maximum long-range firepower. First-echelon positions are shallow and provide only the minimum protection of flanks, rear, and critical observation. The division first echelon usually consists of all regiments. The division second echelon normally consists of a reinforced rifle battalion from each regiment and elements of the antitank battalion and the medium tank regiment. The second echelon occupies the next line of defense to the rear with the reinforced rifle battalion behind its parent regiment. The second echelon supports by fire, and when necessary by counterattack, the withdrawal from the forward line of defense. When the units from the forward line complete their withdrawal through the line occupied by the second echelon, the division second echelon assumes the responsibility for the defense of a part of the line and a new second echelon is constituted.

c. Regiments normally have a second echelon of a reinforced rifle company. Battalions usually have a rifle platoon and elements of attached self-propelled guns and medium tanks as a second echelon. The battalion second echelon is located within the battalion defense area and is used to eject minor enemy penetrations and cover the withdrawal of the battalion.

244. Frontages and Depths

a. The frontages assigned to rifle, mechanized, and tank divisions depend on the terrain, composition of enemy forces, and the total frontage to be defended by the larger force (corps or army). Typical frontages for motorized units are—

Rifle battalion	3 to 4 miles
Rifle regiment	8 to 12 miles
Rifle or mechanized rifle division	15 to 25 miles
Tank division	15 to 20 miles
Rifle corps	32 to 60 miles
Rifle army	100 to 180 miles
Mechanized army	50 to 75 miles

b. Divisions achieve depth by locating the second echelon on the next line of defense to the rear. Under conditions of nonactive atomic warfare, distances between division lines of defense range from 7,000 to 10,000 meters. Under conditions of active atomic warfare, they are about the same.

245. Conduct of the Defense in Successive Positions

a. Units occupying defense areas open fire against the enemy at maximum range with all available weapons. The mission is to delay the enemy, to force him to deploy, to hinder the removal of obstacles, and to inflict maximum personnel and equipment losses. This accomplished, the units on order of their next superior commander, rapidly withdraw under cover of all available supporting fires to the next line of defense. Small detachments are left behind to maintain contact with the enemy. Withdrawal is completed before the unit becomes heavily engaged with the enemy. Tank units, independently and jointly with rifle units, may make shallow attacks to cover the withdrawal of troops to the new line. Withdrawals by divisions from defense lines are controlled by the rifle corps or the mechanized army as appropriate.

b. Penetrations are attacked from both flanks in an effort to fix the enemy and destroy him with nuclear fires. Small yield nuclear weapons are used extensively, including the surface-to-surface fires of antiaircraft missile units within range. Ambushes reinforced by antitank weapons are used between the lines of defense.

c. In conducting a successive position defense against an enemy superior in armor and motorized infantry, the Aggressor commander creates a strong antitank defense, echeloned in depth, with a highly developed and coordinated system of obstacles, especially on the flanks. Where possible, rifle and artillery are deployed in areas with poor tank approaches. Tanks are used in mass on the most important avenues of approach, for ambushes and for surprise attacks against the enemy flanks. Supporting aviation and nuclear fires are concentrated against approaching tank and motorized units, especially when in defiles and when breaching obstacles.

CHAPTER 11
ARTILLERY AND AIR SUPPORT IN THE DEFENSE

Section I. FIELD ARTILLERY

246. General

Artillery, including mortars, rockets, and missiles, is considered by Aggressor as the main weapon of the defense. In all types of defense, artillery fires are used to disrupt and weaken the enemy so that the surviving elements can be destroyed by rifle and armor troops in close combat. Nuclear fires are integrated into the scheme of defensive fires. Control of artillery is patterned to fit the requirements of the tactical situation.

247. Fire Missions

Artillery fire missions common to all types of defense are—

a. Fire against enemy march columns and troop concentrations.

b. Support of units in forward positions.

c. Interference with the deployment of the attacking enemy.

d. Counterpreparations.

e. Counterbattery and countermortar fire.

f. Firing of smoke against enemy observation posts.

g. Destruction of the enemy in front of the forward defense areas.

h. Destruction of enemy units which have penetrated the defenses.

i. Preparation fires for and support of counteroffensives and counterattacks.

248. Organization for Combat

The organization for combat of field artillery in the defense is similar to that for the offense as described in chapter 9. Groups are located to be able to execute their primary mission and yet be capable of massing their fires in support of the forward defense positions, particularly against armor attack. Each artillery battery, and where possible each piece, prepares a primary, alternate, and night-firing position.

249. Planning and Control

a. Artillery plans are prepared at the highest artillery echelon consistent with the tactical situation. Artillery plans are based on continuous zones of fire forward of the leading defense areas. Fires are also planned throughout the depth of the defenses and include plans for massed fires on threatened defense areas.

b. The artillery commander develops a fire plan for each sector covering all phases of the defense. This plan includes—

(1) Concentration by long-range artillery and nuclear delivery means on enemy artillery positions and nuclear weapons delivery sites, approach routes, defiles, troop concentrations and important installations in the enemy rear.

(2) Massed fires on enemy tanks, assembly areas, command posts, and observation posts.

(3) Direct fire against tanks which have penetrated the position.

(4) Barrages in front of the forward defense areas and in the depth of the main battle position.

(5) Fires in support of counterattacks.

c. Fire plans include a counterpreparation. The counterpreparation, controlled by a carefully prepared fire plan and detailed time schedule, starts usually on rifle corps order, when the enemy moves into forward assembly areas and begins attack preparations. To obtain complete surprise, registration fires may be prohibited. Atomic fires normally precede nonatomic artillery counterpreparation.

Section II. ANTITANK ARTILLERY AND ANTITANK DEFENSE

250. General

Aggressor antitank defense is usually planned and coordinated at army level. Division and regimental commanders are responsible for the antitank defenses in their sectors. Antitank defense is provided by antitank artillery units, antitank mines, tanks, artillery, and obstacle placing detachments. In addition, air units give high priority to attacks on hostile tanks. Antitank defense plans are based on—

a. Locating defensive positions in terrain unfavorable for the operation of armor.

b. Attachment of additional antitank units to frontline defensive positions to cover the most dangerous avenues of approach.

In areas where there is a serious armored threat, 25 antitank guns for every linear 1,000 yards of front may be used.

c. Placing extensive minefields on avenues of approach.

d. Destroying enemy armor with nuclear fires while in rear areas and attack positions.

e. Concentrating artillery fire on enemy tanks as they approach the defensive position and separating any accompanying infantry.

f. Opening fire with antitank guns on enemy tanks as they approach within effective range.

g. Using artillery, antiaircraft artillery, tanks, and self-propelled guns in direct fire on tanks that have penetrated the defense position.

h. Counterattacking armored penetrations with tanks and self-propelled artillery.

251. Employment of Antitank Artillery

a. Rifle battalion antitank guns are usually located in concealed positions within the areas of the rear platoons of forward rifle companies and in the area of the battalion second echelon rifle company. Fields of fire of antitank guns overlap and extend 300 to 400 yards forward of the strong point. Some antitank guns may be located along the forward edge of strong points positioned to deliver flanking fire in front of the strong point.

b. Division antitank artillery adds depth to the antitank defense. These weapons are sited to protect battalion antitank guns from assault. Part of the division antitank artillery is held in mobile reserve in rear of the division artillery positions, to be moved to threatened sectors or to establish antitank positions in depth.

c. Antitank artillery units from higher headquarters, when allocated to a rifle division, are usually located in the division reserve area, if not suballocated to first echelon regiments. Alternate positions are prepared to meet enemy penetrations. These antitank artillery units are deployed to form antitank strong points consisting of mutually supporting platoon areas sited in depth. The guns in an antitank platoon are located in a diamond formation with about 200 yards between guns. Antitank artillery units retained under army control are usually positioned in the second defense zone.

252. Employment of Division Artillery

a. Division artillery units are assigned the following antitank tasks:

(1) Long-range fires.
(2) Concentrations on tanks in assembly areas and at lines of departure.
(3) Creeping barrages.
(4) Fixed barrages.

b. Long-range fires are placed on approaching tank units to cause dispersion, delay, and destruction. Ideal target areas are defiles. All artillery and mortars are used for fires on tank assembly areas and attack positions. They also fire creeping barrages covering probable routes from the attack positions to the forward edge of the defense areas. These barrages separate the tanks from their accompanying infantry. When the attack reaches the forward defense areas, the barrage may remain fixed upon the last line to prevent reinforcements from coming up. Creeping barrages begin as soon as the leading enemy tanks enter the preselected area and are timed to move forward with the enemy advance.

c. All field artillery pieces habitually have at hand several rounds of armor-piercing ammunition. For antitank purposes, an alternate position for each artillery piece is prepared in the vicinity of each firing battery. The 80-mm and 120-mm guns are particularly valuable in direct fire roles. Antiaircraft artillery may also be employed in antitank roles if required.

253. Employment of Tanks and Self-Propelled Artillery

Aggressor self-propelled artillery pieces, 80-mm, 105-mm, and 150-mm are essentially armored fighting vehicles and are usually so used. In antitank defense, tanks and self-propelled artillery are normally used as part of counterattack forces against armored penetrations. Aggressor medium tanks and self-propelled artillery may support rifle battalions when it is believed the enemy armor attack will be too strong for the normal antitank defenses. Tanks and self-propelled guns may be employed to establish ambushes for enemy tank units. These ambushes are set up in horseshoe shape with the open side toward the enemy and on a good avenue of approach. The positions are frequently dug in and are always well concealed.

254. Employment of Mines and Obstacles

a. Aggressor makes extensive use of mines and obstacles both in the offense and in the defense. In the offensive, mines are used to cover positions held by reorganizing troops or to protect flanks. Their greatest employment is in the defense against tanks,

vehicles, and personnel. Antitank minefields are laid with a minimum average density of one mine per yard of front. Since the average distance between mines is 3 yards, 3 rows of mines are required for minimum density. Minefields are laid in great depth.

b. Antitank minefields in the defense are normally placed in belts across likely tank approaches about 400 yards in front of the forward defenses, approaches to strong points, and approaches to the division artillery areas. Controlled mines, detonated by concealed observers, are placed in gaps in standard minefields to be used by Aggressor units traversing the minefield. Delayed mines are used along railroads, road intersections, destroyed bridges, and in probable assembly areas and other localities where enemy concentrations might take place. Antipersonnel mines are laid on the approaches to, and within, antitank minefields.

c. Obstacles, other than mines are placed to cover all probable enemy avenues of approach. Extensive improvisation is used. Local civilian resources are used extensively in construction of obstacles. Principal obstacles are antitank ditches, tank traps and abatis. Obstacles and minefields are covered by fire whenever possible.

Section III. ANTIAIRCRAFT ARTILLERY DEFENSE

255. General

The employment of antiaircraft artillery, guns and missiles, in the defense and the offense differ little as antiaircraft missions are defensive in nature. Generally, missiles are deployed by batteries in lines across the width of the area. The number of lines and density of units per line depend on the type of missile. In this manner, Aggressor achieves an effective air defense in depth. All missile units that are not used to make up the defensive lines are deployed around critical installations to provide additional protection. Because of their relatively short range, antiaircraft guns continue to be used in concentric circles around the defended area.

256. Employment in Rear Areas

a. Antiaircraft artillery guns in rear areas protect troop assembly areas, lines of communication, logistical installations, artillery position areas, and missile sites. In protecting troop assembly areas and rear echelon installations, antiaircraft artillery guns normally are deployed in concentric circles around the defended

area. The diameters of the circles depend on the extent of the area to be defended and the number and range of the available antiaircraft weapons.

b. The SARAH missile units are deployed as in paragraph 255, and furnish long range, high altitude protection for critical installations within the army group area. A distance about two-thirds of the maximum range of the weapon separates the batteries. Only one battery at a time is out of action during movements to new positions. These missiles can be used in a surface-to-surface capacity if required.

c. The SAMMY missile units are normally deployed in a line across the width of the area. This line is generally located immediately behind the second defense zone. The launching batteries are located at a distance about two-thirds the maximum range of the weapon from each other. As the battle progresses, forward displacement is by battery, with batteries moving about 25 to 40 miles. No more than one-sixth of the missile units displace at one time. During withdrawals, displacement is by regiment. Defensive firepower is maintained at all times.

d. The SALLY missile units are deployed throughout the area to provide low altitude protection for critical installations and troop assembly areas, and to complement the SAMMY missile units. SALLY missiles normally are deployed in two lines. The first line is near the rear of the main defense zone with a distance between the batteries about one and one-half times the maximum range of the weapon. The second line is located in the second defense zone, and the distance between these batteries is about two-thirds of the maximum range of the weapon. Withdrawal operations are similar to those of the SAMMY missile regiments.

e. All positions are dug in and camouflaged. Alternate and dummy positions are prepared. Movements and preparation of emplacements are accomplished at night or other periods of reduced visibility.

257. Employment in Forward Areas

a. In forward areas antiaircraft artillery protects troop concentrations, forward area installations, and lines of communication. Antiaircraft artillery is also used for ground fires, primarily for direct fires.

b. In protecting troops deployed in forward areas, antiaircraft artillery is usually deployed in lines. Antiaircraft machineguns are used by platoons from 300 to 500 yards in rear of the protected

elements. Light antiaircraft guns (40-mm) are employed by batteries on a line 1,000 to 1,500 yards from the forward elements. The distance between batteries is from 1,000 to 2,000 yards. The distance between platoons is from 100 to 150 yards. The distance between individual pieces is at least 30 yards. The medium antiaircraft guns (55-mm) are emplaced by batteries on a line approximately from 2,000 to 3,000 yards from the forward elements. The distance between batteries is also from 2,000 to 3,000 yards, and the distance between individual pieces is at least 30 yards. The 80-mm antiaircraft guns are emplaced by batteries, either on a line or in a two by three rectangle, approximately 5,000 yards from the forward elements. The distance between batteries is approximately equivalent to one-third the maximum range of the weapon, and the distance between individual pieces is at least 40 yards. Antiaircraft units are dug in and camouflaged. Alternate and dummy positions are prepared. If fire against ground targets is anticipated, special dual-purpose emplacements are prepared. The depth of emplacements is such that gunsights are protected from shell fragments.

c. In protecting assembly areas and forward installations, antiaircraft artillery is deployed in concentric circles. Distances between the batteries, platoons, and individual pieces are the same as those employed in linear defense. Heavy antiaircraft guns (105-mm) are usually not employed further forward than the location of corps artillery groups. They are deployed by battery in rings around the defended area with about 6,000 yards between batteries.

258. Command

The commander of antiaircraft artillery is subordinate to the artillery commander of the force. The artillery commander, not the antiaircraft commander, changes the missions of the antiaircraft artillery and shifts its effort to ground support missions. The commander of the antiaircraft artillery maintains communication with the artillery commander. The commander of the organic antiaircraft artillery unit establishes the antiaircraft warning service for the command.

259. Tactics

Antiaircraft artillery tactics are not stereotyped or passive. Based on enemy tactics and habits, the antiaircraft artillery commander maneuvers his batteries, uses ruses, and, in cooperation with light aviation, lures enemy aircraft into firetraps.

260. Fire Control

In tracking individual targets, an antiaircraft artillery battery fires as a unit from data computed by a rangefinder and director or by radar and computer. In firing moving and stationary barrages, the batteries use precalculated data based on anticipated enemy actions. These fires can begin on order from the battalion or higher headquarters, or if need be, can begin on order from the battery commander. These barrages are used only when tracking is impossible because of meteorological conditions or other causes. In direct fire against land targets, fire is controlled by individual gun commanders. When massed fire is desired, a battery is used as the firing unit.

261. Support of Operations

a. In the offense antiaircraft artillery protects march columns, units, and materiel in assembly and deployment areas, and supports the assault by fires against ground targets. During the artillery preparation for the assault, antiaircraft artillery, in addition to its primary mission, is used in fire against enemy fortifications, firing positions, and observation posts. During the assault, light antiaircraft artillery guns and machineguns accompany the assault teams to protect them against air attacks. Usually, antiaircraft weapons are concentrated in the sectors where the assault is most successful.

b. In the defense, priority for antiaircraft protection is given to major rear installations and rail centers. Divisional antiaircraft units protect only selected installations or positions within the division area. Priority in the division is in the order; division artillery, second echelon forces, forward positions, and support of counterattacks. Reinforcing or attached antiaircraft artillery units assist in protection of first echelon forces and in support of counterattacks. Direct and indirect observed fire against ground targets is used as part of artillery counterpreparations. Antiaircraft artillery guns are assigned targets whose destruction requires high velocity projectiles. Observed indirect fire is controlled in the same manner as field artillery.

Section IV. AIR SUPPORT

262. General

Air forces in the defense use the same tactics as in the offense. However, different types of missions are emphasized.

263. Missions

In supporting the defense, air armies carry out the following specific missions:

a. Reconnaissance to locate enemy dispositions and to obtain early warning of the direction and strength of attacks.

b. Attacks on enemy concentrations to include delivery of nuclear fires.

c. Air strikes in close support of forces in contact.

d. Support of counterattacks.

e. Destruction of enemy nuclear delivery systems.

f. Destruction of enemy airbases.

g. Counterreconnaissance.

h. Attack of enemy penetrations.

264. Air-Ground Coordination and Priorities

Air-ground control posts are established in the same manner as in the offense. Priority of air support is given to those units in the path of major enemy forces. Priorities for air support are established by the army group.

265. Mutual Air-Artillery Support

a. As in the offensive, artillery is supplemented by airpower and, in turn assists air units. As the enemy approaches main defense positions, artillery and the air force render mutual support by—

(1) Artillery marking air targets and neutralizing enemy antiaircraft guns.

(2) Aircraft reporting to the artillery, targets which have been spotted from the air but cannot be observed from the ground.

b. Assignment of targets to the air force or the artillery depends on the nature of the target and on the observation available from the ground and in the air. Sorties to be flown within the effective range of artillery fire are coordinated with the army artillery commander. Air participation in counterpreparations is coordinated by the rifle corps commander.

c. Air support of counterattacks is essentially the same as support of an offensive. Air elements supporting counterattacking forces are committed to action on orders of air liaison officers with the ground force commander.

CHAPTER 12
DEFENSE AGAINST NUCLEAR EFFECTS AND TOXIC CHEMICAL AND BIOLOGICAL AGENTS

266. General

Aggressor has developed specific measures to reduce the effects of blast, thermal, and radiation effects of nuclear weapons and the effects of toxic chemical and biological agents against command structures, personnel and materiel. These measures are detailed and complete, and are used by all units in all types of operation, both in rear and forward areas, with technical assistance of chemical and engineer troops. Such specific measures are used in conjunction with other protective measures such as continuous contact with the enemy, withdrawal from expected target areas prior to enemy nuclear attack, dispersion, rapid movement, camouflage, and deception.

267. Toxic Chemical and Biological Defense Measures

a. In order to insure adequate CW and BW protection, Aggressor has developed a variety of means for individual and collective protection. These include—

(1) Protective masks which afford respiratory protection against all known chemical agents, as well as chemical protective covers and special protective clothing for operations in contaminated areas.

(2) Shelters for use of individuals, groups, small units, headquarters and command posts, and medical aid posts.

(3) Personal decontamination equipment, decontamination stations, and medical facilities for evacuation as required.

b. Aggressor organization and training for toxic chemical and biological warfare protection is a responsibility of every commander and is included in the planning and preparation for any action. Training programs stress gas discipline and rapidity in masking. Toxic chemical and biological defense measures are applied continuously whether or not the threat of the use of nuclear weapons exists.

c. Chemical and biological observation is conducted by all troop units, and by chemical troops where available, on a continuous basis. The mission of observers is to determine enemy preparations for chemical or biological attack and to warn units upon indication or initiation of such attacks.

268. Defense Measures Against Nuclear Effects

Standard defense measures of this type are—

a. Concentration of the intelligence effort to determine the enemy's intention to use nuclear weapons in specific areas.

b. Detection of radiological contamination.

c. Troop warning system.

d. Individual and unit measures to reduce nuclear effects when subjected to nuclear fires.

e. A prescribed system to insure continuity of command and operations.

f. Procedures for decontamination of personnel, weapons, equipment, and supplies exposed to radiological contamination.

269. Responsibility for Nuclear Effects Defense Measures

a. The Aggressor intelligence organization is responsible for detecting enemy intentions regarding the use of nuclear weapons. Regimental and higher headquarters are responsible for insuring uninterrupted control of operations.

b. Chemical troops are used for—

(1) Detecting radiological contamination and surveying of areas to determine the extent and intensity of contamination

(2) Warning troops of the presence of contamination.

(3) Assisting in training of troops in nuclear effects defense measures.

(4) Supplying protective equipment and radiation survey instruments and personnel to units.

c. Engineer troops are used for—

(1) Selecting and preparing sites for attack positions, deployment areas, command posts, and rear area installations which offer maximum passive defense against the effects of nuclear weapons.

(2) Clearing debris resulting from nuclear attacks.

(3) Constructing and maintaining roads, bridges, and detours necessary to bypass areas made unusable by effects of nuclear fires.

(4) Decontaminating routes through areas subjected to radiological contamination.

(5) Testing water sources to detect nuclear contamination and decontaminating water supplies when necessary.

270. Radiological Reconnaissance

a. Unit commanders are responsible for radiological monitoring. It is performed on a continuous basis whether or not nuclear weapons have been used. The actual monitoring is done by the chemical troops of the unit under the supervision of the unit chemical officer. Chemical and biological reconnaissance are carried out concurrently.

b. Three types of radiological reconnaissance are—

(1) *Chemical observation posts.* These posts consist of 3 individuals who periodically check their unit areas for the presence of radioactivity and chemical agents. There is at least one post per battalion. The battalion commander is responsible for warning his unit and higher headquarters.

(2) *Dosimeter patrols.* Four or more dosimeter patrols are formed by the chemical detachment of each regiment. Each patrol contains an officer or noncommissioned officer and 3 to 5 enlisted men. They operate on foot, or use motorcycles, vehicles, armored carriers, tanks or aircraft to carry out radiological survey for the regiment. These patrols have more elaborate detection equipment than chemical observation post personnel.

(3) *Individual radiological specialists.* These personnel or teams are attached to advance guard, reconnaissance, security, quartering, or any other special details which may need the services of personnel trained in radiological detection methods.

271. Warning Systems

Aggressor uses two types of nuclear effects warning systems. One system warns of the presence of radiation and the other warns of the imminent use of friendly delivered nuclear weapons. Chemical troops issue the warning of radiological contamination, using all available means of communication. Care is taken to insure that every soldier is warned. Warning of the imminent use of nuclear weapons uses the air warning service system.

272. Individual and Unit Protective Measures

Continuous individual measures for protection against nuclear effects include the use of cover and concealment, chemical protective clothing and equipment, and the use of special protective clothing for decontamination work. Unit measures consist of extensive use of camouflage, night operations, dispersion, construction of shelters and installations capable of withstanding the effect of nuclear weapons, and alternate command posts. Engineer troops assist in the construction of suitable trench works and shelters. Elaborate underground shelters are prepared whenever possible.

273. Decontamination

Aggressor employs either complete or partial decontamination. Neither type is used if it interferes with the unit mission. If possible, units are relieved and moved to the rear for decontamination. Every unit prepares detailed decontamination plans. Complete decontamination is performed only in the rear areas after the unit has been relieved. Partial decontamination is done at unit level to the extent of available time and equipment.

274. Fire Prevention and Damage Clearing Measures

Aggressor units form special fire-fighting details and prepare plans to limit the damage created by fires caused by nuclear effects. Positions are made as fireproof as possible. Areas subjected to nuclear attack are cleared of refuse and rubble as soon as possible. Combat units do as much of this work as possible. Engineer troops perform major repair, debris removal and area decontamination. Chemical and medical troops handle other decontamination and treatment of casualties.

CHAPTER 13
SPECIAL OPERATIONS

Section I. AIRBORNE OPERATIONS

275. General

Aggressor considers airborne forces as an offensive arm for use in special types of operations and as invaluable adjuncts to all types of operations under atomic warfare conditions. Airborne operations are conducted in connection with other ground forces operations. Operations involving airborne forces of corps strength are usually controlled directly by the army group or regional command. Airborne divisions are usually reinforced with appropriate GHQ units as required by the situation. A SALLY antiaircraft artillery missile battalion is usually attached to each airborne division. Airborne tasks are of short term nature and usually require the link-up of the airborne force with other ground forces within 2 or 3 days. Helicopters are used for many airborne operations. Rifle and mechanized division troops are trained in air-landed operations.

276. Missions of Airborne Forces

a. Aggressor airborne missions support operations of specific ground units. Airborne missions are executed by separate airborne divisions, regiments, and battalions, employed independently or as part of an airborne corps. Typical airborne missions are—

(1) Support of ground troops in surrounding or destroying an enemy force.

(2) Seizure of defiles and sectors in enemy rear areas to prevent his withdrawal, blocking of reinforcements, or facilitating the advance of friendly ground forces.

(3) Seizure of the area of a proposed junction of two ground forces columns in order to expedite the final stages of an envelopment and to prevent the escape of enemy forces.

(4) Seizure of river crossing sites deep in enemy territory to deny them to the enemy and to facilitate the advance of Aggressor forces.

(5) Destruction or capture of important command and communication centers.

(6) Seizure of coastal areas to secure landing sites for seaborne troops.

(7) Reconnaissance missions deep within enemy lines.

(8) Support of night combat operations by seizing objectives to be occupied by advancing ground forces.

(9) Seizure of water and fuel supplies in the enemy rear when operating in desert or thinly populated areas where such supplies are scarce.

(10) Outflanking of mountainous areas or enemy fortified areas in order to isolate the enemy.

(11) Sabotage or seizure of enemy nuclear weapons sites and forward airbases from which aircraft delivering nuclear weapons can operate.

b. Airborne missions of strategic significance are carried out in support of the army group or regional command. Missions of this type usually involve large airborne forces. Typical strategic missions are—

(1) Seizure or destruction of important industrial targets, centers of communication, electrical power production and distribution centers, and nuclear weapons storage areas.

(2) Seizure or destruction of centers of government or other important control centers.

(3) Capture or destruction of important experimental, testing, production, or storage facilities for nuclear, chemical or biological weapons and agents.

277. Employment of Airborne Corps

Airborne troops may be employed in corps strength. In the initial phases of a major offensive, the airborne corps may be employed for destruction of road and rail communications and seizure of terrain to prevent the enemy from moving reserves and supplies. During the penetration phase of the attack, the airborne corps may be used to occupy positions in rear of the enemy defensive zone in order to isolate the battle area.

278. Reconnaissance for Conduct of Operations

The army group's reconnaissance plan provides for the possibility of airborne assaults in the enemy rear. Once it has been decided to launch an airborne operation, extensive reconnaissance

takes place. The first object of reconnaissance is to select suitable objectives and drop zones, and then to reconnoiter for all enemy forces and defenses within striking range of the area chosen. Reconnaissance is carried out by air, clandestine agents, and by parachutists. The latter are given the minimum information about forthcoming operations. Other groups of parachutists are often dropped outside the area of a proposed operation as a deceptive measure.

279. Flight

Routes are chosen to avoid enemy antiaircraft and fighter defenses, and to reach the objective as soon as possible. Secrecy and deception are emphasized. If the commander of an airborne regiment or higher unit receives information during flight to the effect that the air or ground situation has altered, *he* may change the drop zone or landing point of his unit. His decision is reported to the next higher commander without delay.

280. Landing

Aggressor airborne troops can be dropped in any season of the year and at any time of the day. Flight and landing by night are usually carried out only by small independent units. Troops are dropped from minimum safe heights and supplies follow immediately after them. Supplies are normally dropped from heights of from 300 to 600 feet. Supply-carrying aircraft normally fly at from 3 to 5 minutes behind troop-carrying aircraft. Parachutes are either concealed or destroyed after landing. Gliders and aircraft land as soon as the necessary ground has been secured by paratroops.

281. Conduct of Operation

a. Nuclear fires may precede the airborne assault. After landing, airborne troops overcome any local enemy resistance and then occupy previously selected areas. Their employment is then centralized or decentralized, depending on their mission and situation. The first airborne wave contains a specially trained detachment to seize all communications means in the objective area to prevent the enemy from learning about the landing, and to spread false information.

b. Decentralized action is used in large areas to disorganize enemy control and command, to hinder movements of troops and supplies, and to destroy small enemy detachments. The force is divided into battalions, platoons, and even squads which are

allotted independent tasks. Provision is made to assemble the force if necessary.

c. In airborne operations of larger units, several airborne assaults are made in different localities. The more successful of these assaults are reinforced and subsequently merged into one airhead if adequate dispersion can be maintained. When the assaults do not meet with initial success, the surviving airborne units conduct guerilla type operations until they are rescued or return to friendly lines.

d. Long-range missile units are used extensively to support air-borne operations with either nuclear or nonnuclear fires.

282. Logistics

a. Resupply is by air, usually by night or at dawn. Supply dumps are established in uninhabited places and under cover. Technicians equipped to carry out minor repairs accompany the force. Troops are trained in the use of captured enemy weapons, vehicles, and equipment.

b. Medical aid stations are set up in concealed localities. Wounded are evacuated by air, if possible, and usually at night. Normally, airborne units rely on link-up with ground forces so that the wounded may be evacuated by the organizational means of the link-up forces.

283. Air Support During Operation

Fighter aircraft escort the transport aircraft. During the landing, fighters protect the landing zone from enemy air attack, engage enemy antiaircraft positions, give close support to the troops that have landed, engage approaching enemy reserves, and provide smoke screens when required. Bombers may also be allotted for close support and for delivery of nuclear fires. Attack aircraft provide close support to the landed units.

Section II. AMPHIBIOUS OPERATIONS

284. General

a. Aggressor's amphibious tactics and material are similar to those of the United States. His amphibious landings are generally carried out in direct support of ground operations. Typical missions are—

(1) Seizure of important objectives in enemy rear areas.

(2) Seizure of areas which cannot be captured through direct ground action.

(3) Aid in completing encirclements.

(4) Carrying out of raids and sabotage.

(5) Collection of intelligence.

b. Nuclear weapons are used to destroy enemy short batteries and fixed coastal defenses, and to protect beachheads from counterattack. Aggressor may use airborne forces in coordination with amphibious landings.

285. Troops Employed

Aggressor amphibious operations are carried out by specially trained ground and naval forces. Army ground forces rarely exceed corps size. One or more naval rifle battalions are usually attached to each ground division for the operation.

286. Command

Landings in direct support of an army group operation are usually carried out under control of the army group commander. Other landings are usually under naval command. In any case, once a beachhead is established, control of the operation is transferred to the commander of the ground forces that participated in the landing.

287. Defense Against Amphibious Operations

a. Aggressor coastal defense or counteramphibious operations involve ground, naval, and air forces, with nuclear support, to include the surface-to-surface fires of antiaircraft missile units within range. Aggressor coastlines are fortified with fixed and mobile artillery, with ground defenses protected against enemy nuclear attack, and with underwater and onshore obstacles at all points where enemy landings are feasible. The main line of defense is the first high ground paralleling the shoreline.

b. Ground forces to defend coastal areas are designated by the army group controlling the coastal area. The army group controls all naval, ground, and air elements assigned to the coastal defense. In those areas which are not within an army group zone, a special combined arms force under naval command defends the area. A rifle corps engaged in coastal defense will usually be assigned an area comparable in width and depth to a rifle corps defense area in a decentralized position defense. If there is an extremely good road net in the coastal area, a wider front may be assigned.

c. Units defending coastal sectors organize their defenses into

two echelons. The first echelon contains rifle divisions, field and coastal artillery units, and an armored counterattack reserve. This echelon prevents enemy landings and the establishment of a beachhead. The second echelon and reserves consist largely of armored units, or the mechanized division of the rifle corps. Its mission is to combat enemy airborne landings and to counterattack major lodgements.

d. Aggressor uses clandestine agents, long-range aerial and naval reconnaissance, to locate enemy amphibious forces. When detected, the enemy amphibious force is subjected to attack. Air and naval forces attack before the enemy beach assault is launched. The enemy forces that succeed in landing are cut off from further support from the sea and destroyed.

Section III. COMBAT IN SNOW AND EXTREME COLD

288. General

a. Aggressor forces are trained and equipped to operate in extreme cold and heavy snow. Cold is counteracted by the following methods:

(1) Troops are kept under shelter as much as possible. Improvised shelters are used whenever troops occupy temporary positions. Inhabited localities are avoided.

(2) Special clothing is used.

(3) Strong points and pillboxes are heated.

(4) Attacking troops move from improvised shelters in assembly areas to the line of departure at the last moment.

(5) Tanks, vehicles, and guns are inclosed as much as possible with snow walls and branches of trees.

(6) Warming posts are established all along lines of communication and in rest areas, where drivers can stop and warm themselves.

(7) Casualty clearing stations are sited well forward so that wounded can be treated early.

(8) Helicopters are widely used for casualty evacuation.

b. Aggressor army considers that only tanks with special snow tracks and rifle units on skis can operate in snow 2 feet deep and that 3 feet of snow is the upper limit for possible movement. All units improvise sleds for machineguns and mortars, and for carrying supplies. Artillery is fitted with runners, and tractors may have spikes fitted to their tracks.

289. Ski Troops

a. Ski troops are characterized by their high mobility. They are able to move across country and appear suddenly in enemy rear areas. Although possessing great firepower for close combat, ski units are not suitable for attack of strong defensive installations and fortifications nor for use in sustained defense.

b. Ski units achieve surprise in attack by deep envelopment of enemy flanks, infiltration between enemy strong points, and by effective counterreconnaissance and security measures. Ski units pursue and destroy a retreating enemy. When the enemy succeeds in organizing a defense, ski units maintain contact until they are relieved by rifle units.

c. Ski units can carry out operations at great distances from their own bases under difficult and quickly changing circumstances. Their operations must be carefully coordinated with other arms, especially aviation and artillery. A ski unit can operate up to about 4 days while separated from its base.

d. Ski units, up to battalion size, are able to carry out reconnaissance deep in the enemy rear. Such units may operate jointly with guerilla detachments. Ski units reach enemy rear areas by infiltrating in small groups by moving around exposed flanks, or through gaps created by attacking forces. Isolated routes are used when possible. Laying of false ski trails to conceal the true direction of movement of ski units headed into enemy rear areas is accomplished by special designated elements. While moving toward enemy rear areas, ski units seek to avoid combat with strong forces. Small enemy groups interfering with accomplishment of the mission are destroyed. When the ski unit cannot avoid combat with a strong enemy force, it attacks the enemy quickly and with full force. If the attack fails, a part of the force may be left to harass, confuse, and contain the enemy while the main force disengages.

e. When operating in enemy rear areas, assembly points, in close proximity to the objective, are established before the attack. When action is broken off, small groups, under cover of darkness or broken terrain, assemble at the previously designated assembly point or points.

290. Artillery

Movement of motorized artillery in snow more than 12 inches deep is usually confined to roads. Aggressor artillery may be mounted on sleds. Corduroy and mat roads may be prepared to allow movement of artillery. Tractors are often equipped with

grousers. In snow less than 12 inches deep, cross-country movement is possible but engineers may have to break a path. Mortars and rockets having greater mobility than towed artillery are used extensively in areas of snow and extreme cold.

291. Tanks and Self-Propelled Guns

Tanks and self-propelled artillery are frequently used to replace towed field artillery because of greater maneuverability in snow. Aggressor equips tanks with grousers for movement over slippery terrain. In addition, special mats are used for movement over snow slopes. Since tank tracks are clearly visible in fresh snow, Aggressor moves tanks in column during the night, or in a snowstorm. Often the last tank in the column will drag sleds or trees to erase the tracks and create the appearance of an ordinary trail.

292. Offensive Operations—General

The objectives of offensive operations remain unchanged. Seizure of road nets and envelopment tactics are of greater importance. Offensive operations are often conducted during blinding snowstorms or at night to achieve surprise. Lines of departure are as close to the enemy as possible to avoid tiring the troops before the assault. Before an assault, trenches are cleared of snow and are extended as close as possible to enemy positions, sometimes encircling them. Attacking troops use these trenches and leave them only at the last moment.

293. Defensive Operations

a. The organization of the defense is generally unchanged. Extensive use is made of snow and ice obstacles. Defense installations avoid inhabited areas. Adequate troop shelter is provided to maintain combat efficiency.

b. The conduct of the defense is generally unchanged. During an enemy attack, Aggressor artillery slows the advance by interdicting roads and thus forcing the enemy to advance across country. Counterattacks are carried out in the usual manner except they are more shallow because of terrain and climate. Aggressor counterattacks, if possible, uses ski units to move downhill with the wind and sun at their backs.

Section IV. COMBAT IN WOODS AND SWAMPS

294. General

Operations in wooded and swampy terrain are carried out by small self-sufficient units. Objectives are roads, clearings, road

junctions, small woods, heights, and inhabited places. Engagements occur at short distances, visibility is limited, observation is difficult, and infiltration by small units is relatively easy. Movement of large forces is canalized; supply and evacuation must take place over the same routes. Large-scale offensives under conditions of atomic warfare bypass extensive wooded or swampy areas.

295. Swamp Crossing

In crossing swamps, Aggressor makes maximum use of local resources for the construction of improvised aids. Many improvisations have been developed into standard methods. Some of these methods are—

a. The individual soldier uses short branches or bunches of twigs to make 2 mats about 2 yards long and from 20 to 30 inches wide. He crosses the swamp by alternately placing one and carrying the other. A rifle squad uses similar methods and larger mats.

b. Floating bridges are constructed from light logs and branches. These bridges will support light antitank guns.

c. Diagonally constructed floating corduroy roads, from 7 to 8 yards wide, will support from 8 to 10 tons. A similar bridge, about 2 to 3 yards wide, can be used by a motorized column.

296. Employment of Rifle Units

Rifle units usually operate in self-sufficient units of reinforced rifle battalion size. Rifle companies attack in a line of platoons. Second echelons are closer to the first echelon. Flanks and lines of communication are protected. Rifle units are used in small groups (platoon or smaller) to infiltrate and prepare ambushes. Direct-fire artillery weapons are attached to rifle battalions. High-trajectory weapons are normally retained under centralized control.

297. Employment of Armor

Aggressor considers that the effort expended in making possible a tank maneuver in apparently inaccessible terrain is warranted by the surprise achieved. After careful terrain and route reconnaissance, engineer and rifle units construct river and swamp bridges, fill holes, and, when necessary, lay corduroy roads. Tank units are assigned special engineer and rifle detachments which follow the tanks. A typical tank assault team consists of an engineer squad, a tank platoon and 1 or 2 rifle platoons.

298. Defensive Use of Swamps

Small swamps are integrated into the system of defensive obstacles. Large swamps are used to cover frontal or flank approaches to the main defensive zone. The battle outpost line is placed within the swamp. Artificial islands of logs and branches are used to float security detachments and forward observation posts. The main defense zone may be established within a large swamp area.

Section V. NIGHT COMBAT

299. General

a. Aggressor prefers night operations when terrain, dense minefields, and other obstacles eliminate the possibiilty of surprise and will cause heavy casualties in daytime operations. Round-the-clock operations are habitual in order to maintain the uninterrupted momentum of the offensive. Aggressor units are well trained in night operations. Objectives for night attacks unsupported by nuclear fires may be as deep as 5 to 10 miles.

b. Aggressor units are equipped with devices to aid in night fighting. These devices include gun laying telescopes, night viewers, night driving and aiming equipment, and sniperscopes. Battlefield illumination is used frequently to help night attacks. Airdropped flares may be used to illuminate enemy positions.

300. Timing of Night Attacks

The attack is launched at a time when the enemy least expects it or is least ready to repel it. For example, after a quiet period, the attack might be launched at 0200 hours, or after a hard day's fighting, at 2300 hours when tired enemy troops will be seeking rest. Apart from the consideration of surprise, the attack may begin 2 or 3 hours before dawn to permit daylight exploitation of success.

301. Preparation and Planning

Preparations for night attacks are made in detail. Night attack plans are based on careful reconnaissance, simplicity of maneuver, speed of execution, and surprise. Two phase lines are selected. The first is located within the forward defense area of the enemy. The first phase line is used to regroup assault teams and establish coordination with the supporting artillery for the attack of the next objective. The second phase line is so selected that its capture will force the enemy to displace his divisional artillery.

Orientation points for rifle and tank units are carefully designated.

302. Conduct of Attack

a. The deployment area is occupied secretly during twilight hours so that the commanders of assault teams may familiarize themselves with orientation points, phase lines, and avenues of approach. To achieve surprise, artillery preparation is often omitted during the initial assault.

b. The rifle battalion attacks in a single echelon preceded by a small advance guard. Rifle companies are deployed in line, each company being deployed in a line of platoons. Individual riflemen wear white armbands. Squads advance in wedge formation.

c. If the assault zone is narrow (500 to 600 yards), a rifle battalion may attack in two echelons. The second echelon then consists of a reinforced rifle company whose mission is to protect the flanks of the battalion. For raiding missions, a special detachment is formed to evacuate captured documents, equipment, and prisoners. The assault team principle is followed in grouping elements of the rifle battalion. For example, rifle assault teams include company and battalion weapons and engineers, as required by the mission of each assault team.

d. Tanks are frequently employed in night attacks with rifle units. Careful terrain reconnaissance and close cooperation with rifle units are considered essential for successful use of tanks at night. Each tank is assigned a route, mission, and to a specific rifle assault team. Several riflemen are assigned to each tank to aid its crew in locating antitank weapons and obstacles. When the situation permits, tank headlights and searchlights are used to illuminate enemy firing points, to blind the enemy, and to assist obstacle-clearing parties.

Section VI. PARTISAN OPERATIONS

303. General

a. In partisan operations, Aggressor uses generally accepted methods to reduce the enemy's combat effectiveness. Partisan operations are based on the concept of working against an enemy from within and then striking ruthlessly at his weakest point. Supporters of the Circle Trigon Party provide a worldwide network of undercover movements which are at the continuous disposal of the Aggressor Armed Forces High Command. In the event of hostilities, these party sympathizers make an easy tran-

sition to partisan forces. Partisan tactics are generally hit-and-run actions with limited objectives. The purpose of these attacks is to etxend the depth of the combat zone by diverting combat troops to security missions and to disrupt the enemy's supply communication networks.

b. Aggressor stresses that successful partisan operations depend on a sympathetic local population and terrain suitable for concealing the partisan bands. The absence of either or both of these factors reduces the chances of a successful Aggressor partisan movement. Official Aggressor histories, books on partisan achievements, and songs about partisan heroes have all been aimed at making the Aggressor partisan a romantic legend.

304. Organization

a. There are two types of Aggressor partisan groups. One arises spontaneously in enemy-held territory, and the other is specifically trained in the Aggressor's rear area to be infiltrated into the enemy's rear. Partisan groups are usually small at first. As they consolidate, the size of detachments grow to about 50 to 200. The majority of the personnel comprising the detachments are civilians who join the partisans voluntarily. However, impressment is not uncommon. These light and mobile groups have proven to be most effective. These groups eventually form basic subdivisions of brigades. The brigade normally contains a strengh of from 400 to 3,000. This flexible organization permits considerable latitude in the type of partisan operation to be accomplished.

b. The staff of partisan groups includes a commander, a chief of staff, and a political officer. The identity and whereabuts of these individuals are kept as a closely guarded secret even in some instances from members of the group. The political officer is not only responsible for political indoctrination of the personnel but also with ferreting out the politically unreliable and enemy agents infiltrated into the detachment. He may be assisted by 3 or 4 specially trained counterintelligence agents.

305. Personnel

a. Generally, the rural and poorer city dwellers, former soldiers, and fanatical idealists comprise the bulk of the partisan forces. The more prosperous and sophisticated groups usually prefer to support the movement in a covert role or join after the movement is strong. As a general rule, the Aggressor partisan is at least a semispecialist. His trade requires such technical abilities as

good marksmanship and intimate knowledge of explosives and communications. An Aggressor partisan is tough, clever and usually fanatical.

b. Partisans' ranks include active fighters as young as 11 and as old as 80. The young, the old, and the women partisans serve mainly as scouts, couriers, low level espionage agents, and service forces. Many of the partisan leaders are either Aggressor army regulars or Circle Trigonists. Others are former civic leaders and battle-tested veterans. Aggressor prefers to utilize a strong local leader as a focal point around which determined resistance may be organized. If such a leader lacks military background, Aggressor may infiltrate qualified personnel to serve as military and technical advisers. Thus, the military capabilities of the partisan forces are exploited efficiently without destroying the command structure of an established organization.

306. Supplies and Equipment

a. Initially, most partisan supplies are secured locally or from supplies abandoned by the retreating Aggressor armies. Aggressor has been known to leave caches of supplies for possible use of partisans. Because of the ease of obtaining ammunition Aggressor partisans prefer enemy weapons. Partisans have been known to capture and utilize enemy tanks and armored cars. Partisan weapons vary almost as much as does the size of each unit. The most commonly used weapons are automatic rifles, light machineguns, and light mortars. Demolitions are usually of the homemade variety and include box charges, antitank mines, and "Molotov Cocktails." It may be expected that partisan units controlled by Aggressor organizers may employ man portable nuclear demolitions on a limited scale.

b. Aggressor, if possible, resupplies partisan units by air. Weapons, ammunition, and medical supplies are generally air-dropped. In some instances, the partisan controlled area is large enough and sufficiently secure to justify the construction of landing strips.

c. Partisans obtain food from the local population, through a levy system or donations, and from raids on enemy food stocks. The clothing worn is mostly of a civilian nature, though Aggressor and enemy uniforms are frequently used.

307. Training

a. The Aggressor partisan is usually given basic training in weapons, security, fieldcraft, and political indoctrination. The

training is accomplished, when possible, at concealed bases not readily accessible to enemy forces. Under conditions where training organizations and bases are not available, partisan training is accomplished by active participation in operational missions.

b. Advanced and specialized training in partisan schools stresses sabotage and low level espionage and continued political indoctrination. The following subjects are covered:

(1) Demolitions (including use of nuclear demolitions and attack of airfields).

(2) Communications.

(3) Tactics.

(4) Intelligence nets.

(5) Counterintelligence.

308. Tactics

a. The principal tasks of Aggressor partisans are to disrupt the enemy's logistical system, to destroy the enemy's forces, to engage in counterpropaganda, to locate nuclear weapons delivery systems and storage sites, and to furnish intelligence to the Aggressor Armed Forces. Aggressor has efficient communications between partisan groups and the regular forces. The outstanding characteristics of partisan attacks are thorough reconnaissance, excellent camouflage, surprise night attacks, initiative in action, and speedy withdrawals. The partisans' will to resist and their determination to inflict damage, regardless of infractions of international conventions, compensate in part for deficiencies in equipment and number. The success of partisan operations depend upon the ability of the commander to act independently under entirely unexpected conditions. New tactics are developed continually to meet these needs.

b. Some specific tactics developed by Aggressor are as follows:

(1) Railroad tracks are destroyed over large areas. Multiple breaks are made in areas where relatively large groups of partisans can keep the track out of operation for long periods of time. Isolated destruction of railroad tracks is accomplished by smaller teams or individuals in those areas not accessible to large partisan forces. Destruction of railroad tracks is coordinated to insure that breaks are repetitive and, where possible, are made in areas accessible to repair crews with difficulty. Partisans breaching rail lines use security elements on the flanks, along the tracks, and on roads leading to the area. Withdrawals from the area are carefully planned

to avoid fire fights. Rendezvous points are established for control of the withdrawal. Partisans may attack rolling stock simultaneously with demolition of rails. Heavier weapons are used in such attacks and measures are taken to avoid becoming heavily engaged with well-armed forces. Partisans also harass repair crews with small arms and other fires to lower morale and slow rail reconstruction.

(2) Partisans attack bridges by demolition and elimination of bridge guards. Man-portable nuclear demolitions may be used against large and critical bridges.

(3) Partisans use mines and roadblocks to attack vehicle road traffic. Mines placed in defiles and covered by fire are extensively used. Demolitions are used to cause landslides blocking roads and bridges. Wires are frequently stretched across roads at appropriate heights to disable drivers. Wires are usually located just around blind curves.

(4) Wire communications are destroyed by fire and cutting. Radio communications are disrupted by attack of power sources.

(5) Partisans attack water supply systems by use of explosives and atomic munitions. The effect on civilian populations is considered before such attacks are made. Pipelines carrying oil and natural gas are attacked by weapons fire as well as demolitions. Contaminating agents are frequently injected into pipelines. Storage tanks are attacked by incendiary projectiles.

(6) Isolated tanks, guard posts, and small supply installations are favorite targets for partisan attack. Attack of such targets is usually made by stealth. Overt attacks against such targets usually are based on use of diversionary, destruction, and security elements.

Section VII. MOUNTAIN OPERATIONS

309. General

Mountainous terrain seriously limits military activity by channelizing maneuver, complicating control and fire support, reducing communications efficiency, impairing logistical support, and providing the defender with excellent observation. Aggressor does not consider large-scale use of atomic fires in mountains to be practical.

310. Concept

Aggressor considers that the principles of the offensive and the defensive are applicable in mountain warfare with some modifications necessary because of the nature of the area. Flank security is emphasized. Second echelons are echeloned in depth and follow the first echelon ready for action at any threatened point to meet enemy counterattacks in minimum time. The normal maneuver of Aggressor units in the mountains is a combined frontal and flanking attack, the latter being executed by a force larger than that employed frontally. Efforts are made to avoid enemy's outposts, to infiltrate through enemy positions and emerge in enemy rear areas. Simultaneous attacks are then made from several directions on principal strong points.

311. Characteristics of Mountain Operations

Characteristics of mountain operations common to both the offensive and the defensive are:

a. Gaps between friendly sectors which may be occupied by the enemy are blocked by second echelon forces to counter enemy attempts to envelop, outflank, or infiltrate through the gap.

b. Snipers play an important role in preparing ambushes and infiltrating through enemy lines. Close fighting with small arms and hand-to-hand fighting are of increased importance. Since combat in mountains frequently assumes a piecemeal character, initiative on the part of subordinate commanders is stressed.

c. Whenever conditions permit, narrow-gage railroads are built for divisions and larger commands for transporting supplies and evacuating casualties. Tractors are used in large numbers to haul supplies over difficult areas. Air supply is used extensively. Regimental and division supply and evacuation installations are located well forward. The division service area is within 2 hours foot march of the first echelon regiments.

312. Employment of Weapons

Heavy machineguns, heavy mortars, field guns, and light artillery follow rifle units closely. Uninterrupted ammunition supply is of primary importance. Direct-fire artillery plays an important part in mountain fighting. Guns of various types are located on forward mountain slopes for direct fire. In operations against a strong enemy defensive position, artillery control is centralized at regimental and division levels. In pursuit operations control is decentralized to lower echelons. Antiaircraft artillery units are deployed to protect defiles.

313. Employment of Tanks

Aggressor uses tanks extensively in mountain fighting. Tanks are used in small groups to reinforce rifle elements. An assault group may include from 2 to 3 tanks, a rifle platoon, a squad of engineers, and an antitank platoon. Tanks are used for night attacks. Tanks approach enemy positions under cover of darkness and then deliver a sudden assault. Night attacks by tanks require careful preparation. If possible, tanks occupy positions by daylight which permit them to advance directly in the attack from a straight line of march.

314. Control and Communication

a. Command posts are located in close proximity to forward elements. Security of command posts is provided by detachments occupying the heights commanding the approaches. In order to keep abreast of rapidly changing combat conditions, commanders at regimental and lower levels usually stay at their command observation posts. They move forward to new command observation posts immediately after the seizure of crests and spurs which obstruct observation.

b. Radio is the basic means of communication in the mountains. Reliability of radio communication is increased by special training, careful selection of frequencies, siting of radios, and adjustment of antennas. Visual signalling and liaison planes are widely used.

315. The Offensive

Aggressor offensives in mountains are based on a series of attacks to seize heights, ridges, passes, and valleys. Maneuvers generally consist of isolation of separate tactical objectives by double or single envelopment. Main efforts are generally supplemented by several secondary efforts. In attacking enemy positions arranged in altitudinal levels, the fire of all weapons is first concentrated on the lowest level. While rifle units attack that level, artillery and mortars shift their fires to enemy positions at the next higher level. Normally, attacks are made along ridges.

316. Ridge Attacks

Attacks along ridges combine a breakthrough in the valley with an encircling maneuver over the ridges in order to seize commanding heights and road junctions in the enemy rear and on his flanks. The breakthrough is accomplished by a heavy concentration of artillery, tanks, and aviation. In the exploitation

of the breakthrough by mobile units, seizure of road junctions deep in enemy rear areas is stressed since such seizure may also lead to the isolation and defeat of enemy forces in other sectors. In advances along valleys, Aggressor flanks and rear are secured by airborne troops and mountain rifle units who seize heights on the ridges commanding the valley. Flank security units are supported by aerial attacks, artillery fire, and other forces operating in the rear of the enemy defending the heights. Flank security units assist the advancing main body by fire and maneuver on the flanks and in the rear of enemy units in the valley.

317. Attacks Across a Ridge

Attacks across ridges are based on the possession of mountain passes which are secured by the seizure of the heights commanding them. Seizure of heights is accomplished by attacking the enemy's rear in a rapid outflanking maneuver, by landing airborne troops in the rear of enemy units defending the pass, and by simultaneously launching an aggressive frontal assault in coordination with air support.

318. Advance Detachments

In the offensive, rifle battalions, and in some cases companies use rifle detachments to precede the attack. An advance detachment for a battalion normally consists of a rifle platoon reinforced by a mortar squad or section. Before a height is assaulted, these advance detachments infiltrate behind the enemy and open fire on the enemy positions. The height is then attacked from the flanks, where possible, by the main body. An artillery preparation, supplemented by air attacks, usually precedes the coordinated attack.

319. Infiltration Detachments

Infiltration detachments are used to penetrate deep into the enemy rear. Their main task is to control or harass enemy lines of communication. These detachments seize the high ground overlooking these routes. A few riflemen are assigned the task of moving from place to place where they can suddenly open fire to create the impression of greater strength. Infiltration detachments also establish roadblocks at defiles. Infiltration detachments may be built up to sufficient strength to permit their use in pursuit operations following the Aggressor offensive.

320. Reorganization After the Attack

Every captured height or area is immediately consolidated. Supporting weapons are displaced forward to support further

advance. Positions are strengthened by antipersonnel mines, field works, and antitank mines where appropriate. Special emphasis is placed on strengthening strong points on the flanks and covering the intervals between attacking units. Security measures, including patrols, observation posts, and outposts, are immediately taken to prevent surprise by sudden enemy counterattacks.

321. The Defensive

a. Aggressor mountain defense operations stress thorough reconnaissance, well-organized outposts, continuous flank security, and swift counterattacks by second echelons.

b. Observation posts are established from 9 to 12 miles from the forward defenses. Communication is maintained by radio and visual signaling. Relay points are established when necessary. In the outpost area, security elements block roads and other approaches, secure flanks, salients, and intervals between defensive positions. Outpost security elements delay enemy attacks until reinforced by support troops. Support troops in the outpost area counter enemy outflanking maneuvers, destroy small groups attempting infiltration, and, when necessary, cover the withdrawal of friendly elements. In defense of the outpost area, ambushes are used extensively.

c. The main defensive positions are organized along or across the mountain ridge. In either case, the forward edge of strong points is situated on forward slopes although a portion of the forces are usually also on reverse slopes. Firing positions are echeloned vertically as well as in depth. In defending a mountain valley, strong points are located on adjacent heights that permit covering the valley with crossfire. In wooded terrain, defensive positions are organized at the forward edge of the woods or on commanding heights. In the latter case, the woods are used as a natural obstacle. Elevated platforms are built in trees for heavy machineguns and observation posts. Antitank and antipersonnel mines, obstacles of all types, and artificial landslides are widely employed.

Section VIII. COMBAT IN TOWNS AND CITIES

322. General

a. Aggressor avoids, where possible, offensive combat in built-up areas under active atomic conditions. Built-up areas that Aggressor intends to use after capture are not subjected to nuclear attacks.

b. Aggressor considers the attack on a city as comparable to the assault of a fortified zone, but with certain advantages for the attacker. The civilian population imposes a burden on the defending military forces with respect to food, water, health, and shelter. The offense in city warfare has handicaps not found in open terrain. The rubble of destroyed buildings affords the defenders easily adaptable defensive positions with excellent camouflage. The ease of mining and booby-trapping, the presence of traps for armor and artillery, and the danger of collapsing structures favor the defense and must be overcome by specially trained assault groups. The presence of unsuspected passages, such as subways and sewers, and the ease of interior communications facilitate infiltration, counterattacks, and breakout offensives by the defending forces.

323. Reconnaissance

Detailed intelligence is prepared concerning the main fortified city zones, to include firing positions and aproaches affording the best cover. The ease of concealing weapons in city warfare makes their location especially important. Combat reconnaissance detachments may operate in a city for 6 days before an assault. Reconnaissance is continued during the assault. Combat reconnaissance is supplemented by studying city plans and locating utility systems, subways, and sewers. Special patrols are organized to capture prisoners for interrogation.

324. Assault Formations

The basic unit in city warfare is the reinforced rifle battalion. The battalion is deployed for assault in a column formation composed of four distinct groups. The leading, or infiltration group usually consists of a rifle company and an antitank gun platoon. The main body is the assault group and is similar in strength and composition to the rifle battalion assault group organized for the assault of fortified zones. It consists of a rifle company, about one-half of the battalion heavy weapons, and a detachment of demolition engineers from the rifle regiment. Supporting weapons are 2 to 3 battalions of direct-fire guns and a platoon of self-propelled guns. The third group is the support group which includes the remainder of the battalion heavy weapons, 3 to 4 direct-fire guns, and 1 platoon of medium tanks or self-propelled guns. The last group is one rifle company which provides flank security patrols and acts as the battalion reserve. Subgroups of varying size and composition are detached for separate assault missions on isolated structures.

325. Conduct of Attack

a. The first phase consists of driving in outposts and surrounding the built-up area. Some portions of the attacking force are used to prevent enemy counterattacks from interfering with the assault of the city. Tanks cover all exits from the city and a tank reserve is held to engage enemy counterattacks.

b. The city is divided into battalion areas. The attack, launched after artillery and air preparations, is supported by artillery fire and air strikes. The battle then takes the form of a number of independent actions by small units that attack one block of buildings after another, consolidating their gains, and clearing all houses, tunnels, and sewers as they advance.

326. Use of Artillery

a. Light artillery is used to destroy enemy firing positions by direct fire. Batteries attached to rifle units conduct direct fire at embrasures, windows, and other enemy firing positions. In addition to neutralizing enemy firing positions, direct fire is used to create breaches in buildings, walls, and barricades. Guns are displaced forward alternately under cover of heavy fire from other guns and rifle units. Large-caliber howitzers are used to destroy buildings.

b. Mortars cover avenues of enemy troop movements such as street intersections, trenches, and alleys. Mortar-firing positions are placed behind walls or inside buildings close to their targets. Their mobility and effective fire from concealed positions provide strong fire support for the assault groups.

c. The artillery reserve is used for counterbattery and countermortar fire. Massed fire from heavy batteries of the artillery reserve is used against forts or the other strong enemy fortified positions. Other missions for the artillery reserve include interdiction and destruction of enemy supply installations, headquarters, and communication centers. The artillery reserve is retained under centralized control by corps and division.

327. Organization for Defense of Towns and Cities

a. The city is organized for defense in depth and districts are allotted to units. Groups of buildings at crossroads and squares are transformed into mutually supporting strong points and every house in these groups is organized for defense. Solid buildings are connected by holes made through the walls. Ceilings are strengthened by beams and earth, and pulling down the upper stories. Cellars are also connected and are used for intercommu-

nication as well as the sewers, subways and communication trenches dug across streets. Streets are mined and blocked with any available material. Strong points are stocked with supplies.

b. Artillery, air, and tank support do not differ materially from the normal defensive support. Artillery support is also provided by single guns firing directly from strong points. An artillery group outside the city provides fire on call from observers with strong points. Single tanks and self-propelled guns are also sited in strong points, but armor is normally kept in reserve for counterattack.

Section IX. OPERATIONS AT RIVER LINES

328. General

a. Aggressor uses deliberate and hasty river crossings. Under atomic warfare conditions, emphasis is placed on hasty crossings. Hasty crossings permit Aggressor units to maintain the momentum of the attack and prevent presenting a nuclear target at the site of the obstacle. Aggressor usually makes river crossings on a broad front. Diversionary or feint crossings are made in considerable strength. These crossings also provide alternative crossing sites to which the main forces can be diverted should the main crossings fail or be held up. Once the assault has begun, every effort is made to carry it through to its conclusion. If unsuccessful, no further attempts are made in that area and the main effort is shifted to an area where the operation has been more successful.

b. Aggressor river-crossing operations are characterized by large-scale employment of rafts, bridge sections, and boats or ferries to transport armor, artillery, and loaded vehicles without waiting for the completion of bridges. Maximum use is made of field expedients and locally procured boats, rafts, and other material. Bridge construction is usually done at night. In order to hide the bridges from observation, Aggressor frequently constructs them beneath the surface of the water. Smokescreens are used to mask bridge construction and sites and the adjoining countryside.

c. During the advance to contact or pursuit, armored and motorized units are sent ahead to seize bridgeheads. Airborne units may be used. If the leading units fail to capture bridgeheads, then a hasty assault crossing is organized by the following corps, division, or (at the lowest level) regimental commander. If the hasty assault fails, within about 2 days, forces are regrouped and plans initiated for deliberate crossing.

329. Hasty River Crossings

a. Aggressor rifle or mechanized rifle divisions and regiments can make hasty river crossings independently from the march. Crossings made against strong resistance are usually conducted under division control, while those against weak resistance are usually made under regimental control. Units are assigned definite crossing sites whose widths are determined by the existing situation. Within a division, regimental crossing sites are 1 to 3 miles apart. Aggressor prefers to carry out hasty crossings at night or in first light.

b. In the event the division advance guard units cannot seize a bridgehead, they secure the near bank so the assault crossing can be made by the division. Advance guard units send out reconnaissance elements to reconnoiter the river and to select crossing points for amphibious vehicles, ferries, and bridges. Armor with the advance guard is positioned to protect the division flanks. Antitank, assault, and heavy machineguns, and light antiaircraft artillery are moved up to the riverbank where they can deliver direct fire on the opposite bank.

c. First echelon regiments move into assembly areas 1 to 2 miles from the far bank of the river under cover of darkness, and the second echelon regiment goes into assembly areas 6 to 8 miles from the river. Crossing equipment joins the units in their assembly areas. Engineer troops prepare the riverbank for easy entry of units into the river. Each first echelon regiment designates an assault battalion which, in turn, designates an assault company. The assault company is usually reinforced by a platoon of amphibious tanks, an antitank gun, a squad of engineers, and a radiological survey squad. The company is also assigned 4 to 6 amphibious armored carriers to permit crossing the river in one wave. The remainder of the assault battalion crosses behind the assault company in either amphibious armored carriers or in pneumatic boats. Assault companies load into amphibious carriers in their assembly areas, move to the riverbank, and cross directly behind the amphibious tanks during the artillery preparation. The artillery preparation, if any, usually lasts about 10 to 15 minutes. The preparation is fired while the amphibious carriers are moving up to the riverbank or as the vehicles enter the water and cross the river. On reaching the far bank, the company disembarks and attacks enemy positions that can bring direct fire to bear on the river. Vehicles return to the near bank to ferry across heavier equipment. Landing points are prepared for following units. The remainder of the assault battalion then crosses and within about an hour can attack to enlarge the bridgehead.

When the first elements of the assault company reach the far bank, engineer units start assembling ferries and ponton bridges on the near bank. Heavy equipment can usually cross in about 3 hours. With heavy equipment across, the first echelon regiments attack to deepen the bridgehead and to secure the crossing of the rest of the division.

d. Construction of a heavy 60-ton ferry or ponton bridge for the division's heavier equipment is started when direct fire into the site is eliminated. Divisions are usually across the river within 8 hours after the crossing operation starts. They immediately deepen the bridgehead to at least 6 to 8 miles. When the corps second echelon and army elements cross the river, the first echelon divisions break out of the bridgehead. Corps uses its second echelon forces to widen the bridgehead, to encircle and destroy enemy forces along the river to permit commitment of the mechanized army.

330. Mechanized Army in the Hasty Crossing

a. Mechanized rifle divisions carry out the initial crossing. The assault unit for the mechanized rifle division may be a special reconnaissance detachment consisting of a reinforced motorized rifle company. It resembles the assault company described in paragraph 329. As it normally operates with an advance guard well forward of its parent regiment, reinforcements and crossing equipment are assigned for an entire operation, not for just a single crossing. These detachments also have artillery and mortars, and may have tanks and assault guns. Ponton equipment is allocated if tanks and assault guns are assigned. The basic task of these detachments is to reconnoiter the river and establish bridgeheads in order to secure uninterrupted crossing for the regiments.

b. When about 5 miles from the river, the reconnaissance detachment is given a specific sector of the bank to reconnoiter. It bypasses enemy resistance and presses on to the riverbank. Small-sized combat reconnaissance patrols, reinforced by engineers, precede the main body of the detachment and seize existing bridges, crossings, or fords, and establish a small bridgehead. The remainder of the detachment remains under cover until the results of this reconnaissance are available. The detachment crosses the river on amphibious vehicles under cover, if necessary, of artillery fires and smoke provided by the attached artillery and armor. The detachment forms a bridgehead, organizes its defenses, and holds it until the following regiments can cross and extend the bridgehead.

331. Use of Helicopters

Helicopters are used for reconnaissance and to lift reconnaissance detachments across rivers, and to move engineers and equipment to ferry and bridge sites. Helicopters are also used to lift assault elements across rivers and thus avoid actual water crossing operations until a beachhead has been established and secured.

332. Use of Nuclear Weapons

a. Priority for nuclear attacks in a hasty river crossing is given the enemy forces directly covering the crossing site, followed by the reserves of those forces. Once the crossing has been made, the priority for nuclear attack shifts to those enemy tactical and operational reserves constituting a major threat to the bridgehead. In executing nuclear attacks on the enemy forces holding the far side of the river line, the Aggressor forces on the near river side may, if required for safety, withdraw the minimum necessary distance.

b. Vulnerability to enemy nuclear fires at a crossing site is reduced by—

(1) Crossing at times of reduced visibility.
(2) Extending bridgeheads as rapidly as possible to avoid troop concentrations.
(3) Establishing antiaircraft defenses early.
(4) Maintaining reserves of crossing equipment to replace losses.
(5) Maximum use of camouflage.
(6) Extensive use of smoke and deception measures.

333. Antitank Defense Priority

To prevent enemy armor from overrunning bridgeheads, Aggressor sets up antitank defenses as soon as the equipment has crossed the river. The division antitank artillery and engineer mobile obstacle detachments cross immediately after the first echelon regiments. Corps and army antitank units may cross before second echelon divisions.

334. Deliberate River Crossing Operations

a. Aggressor undertakes deliberate river crossing operations only when hasty river crossings fail or when hasty crossings are not possible. The deliberate crossing is carried out in a manner similar to the hasty crossing. However, more detailed planning, reconnaissance, and preparation are involved. Centralized control of the crossing is exercised by the rifle or mechanized army and

wide use is made of nuclear fire support. Crossings, closely controlled, are made on a broad front.

b. Thorough reconnaissance and assembly and equipping of forces are accomplished during the preparatory phase. Every intelligence means available is used to get complete information on the enemy. Units are reinforced in the same manner as for a hasty crossing. A rifle corps usually crosses with two divisions in the first echelon. Divisions cross with 2 regiments in the first echelon and the regiments with 2 battalions in the first echelon. The leading battalions cross in waves of reinforced companies.

c. First echelon battalions are moved into assembly areas under cover of darkness about 1 mile from the river. Artillery is positioned to place fire throughout the enemy forward defenses. The actual assault crossing is usually made just before dawn, preceded by nuclear strikes, and an intensive air and artillery preparation of about 30 minutes. The actual crossing is conducted in about the same manner as for a hasty river crossing.

335. Defense of River Line

In establishing a defense, Aggressor uses river lines as obstacles. Normally, when a river line is so used, Aggressor retains bridgeheads on the far side in order to facilitate later offensive operations. These bridgeheads are not withdrawn unless authorized by the army commander.

Section X. ATTACK AND DEFENSE OF FORTIFIED AREAS

336. General

a. Mobile combat formations of rifle, tanks, artillery, engineer, and aviation units are used to break through the fortified zone. Aggressor doctrine stresses the intensive training of assault groups together with the supporting arms as the most important single factor in the successful assault of heavily fortified zones. At least two rehearsals, by assault groups and supporting arms, where possible, are held in rear areas prior to actual assault.

b. The assault is usually made with the main effort along a single front from 6 to 9 miles wide or in multiple thrusts each approximately 2 miles in width. Secondary attacks are made simultaneously for diversion and to seize isolated fortified positions. Emphasis is placed on attacks against the flanks of the penetration area. Against fortified areas in mountains and swamps, assaults are generally made on a narrower front.

c. The destruction of enemy forces in a fortified zone is accom-

plished by the complete breakthrough of the enemy defensive positions in the sector of the main effort and by subsequent flank attacks against adjacent sectors to clear the entire fortified zone. Mechanized rifle and tank divisions exploit the breakthrough.

337. Organization for Assault

Rifle assault groups are composed of balanced forces of all arms. The composition of the assault groups provides for the immediate replacement of losses in the leading elements. Organization of assault groups begins with the assault division. The basic element is the assault battalion. While some details of the assault organization vary with the situation, the basic structure of assault groups is standard.

338. Assault Division

a. The assault division normally consists of a rifle division reinforced with an engineer regiment. The supporting armor normally consists of one regiment of heavy tanks, some self-propelled artillery, and about a company of mine-clearing, flamethrowing, and bridging tanks. Division artillery is reinforced by battalions of heavy artillery and mortars. The assault engineer regiment includes flamethrower operators and other special engineer troops such as demolitions personnel.

b. The assault division is deployed in 2 or 3 echelons depending on the strength of enemy fortifications, and the width of the assigned zone. Small general troop and antitank reserves are provided. The assault division in the main effort has a zone about 3,000 yards wide. In secondary efforts the zone is about 6,000 yards wide.

c. Four artillery groups operate under division control. The division artillery support group (heavy mortars and medium howitzers) is responsible for neutralization of the forward enemy defenses and, after the assault is launched, for reinforcement of the regimental artillery groups. The division artillery countermortar group (heavy mortars and medium howitzers) and the division artillery destruction groups (heavy howitzers and guns) have missions as indicated by their names. The destruction group concentrates on the destruction of permanent fortifications. The fourth division artillery group is the artillery reserve which is also used for general support of the division.

339. Assault Regiment

a. Each regiment of the rifle division used in the assault is usually reinforced with—

(1) One battalion of the organic division artillery, one battery of the organic division antitank artillery battalion, a heavy mortar battalion, and a medium gun battalion.
(2) Two companies of medium tanks, one company of heavy tanks, one battery of medium self-propelled guns, and a platoon of mine-clearing tanks.
(3) A battalion of combat engineers.

b. The regimental artillery group consists of one organic battalion of division artillery plus a battalion of heavy mortars. This group is under division control during the artillery preparation but passes to control of regimental commanders during the assault phase.

c. The rifle regiment formation in the assault is usually in two echelons. If the enemy fortifications are in considerable depth, the regiment may attack with three echelons. The first echelon clears passages through obstacles and minefields and assaults specified fortifications. The succeeding echelons provide security for the regiment's flanks, widen the gaps created by the first echelon, and pass through the preceding echelon to extend the depth of the penetration. The assault regiment in the main effort is assigned a frontage of up to 1,500 yards.

340. Assault Battalion

The assault battalion is the basic unit in the assault of fortified positions. It consists of a rifle battalion reinforced by two batteries of light guns or medium howitzers, a company of 105-mm or 80-mm self-propelled guns, and a company of engineers. The assault battalion deploys on a front approximately 750 yards wide and about 400 yards deep. The assault battalion forms two assault companies. The third rifle company is used to reinforce assault companies and the direct-fire artillery group, and to act as the battalion reserve. Each assault company deploys two rifle platoons abreast. Infiltration and trench-clearing teams, as well as personnel for flank security, are organized from the third platoon. Each assault company is reinforced by an obstacle-clearing group of 1 engineer and 1 rifle squad, and a direct-fire artillery group of light guns or a medium howitzer battery, an 80-mm antitank gun platoon, and a rifle squad for security. Direct-fire artillery does not participate in the artillery preparation. The battalion mortars remain under centralized control.

341. Tactical Preparations

Tactical preparations consist of preparatory fires, gapping of obstacles, and final preparation by assault units. The nuclear

preparation is greater than that used in a normal attack. Nuclear fires are used to destroy obstacles, minefields and to reduce the need for extensive use of engineer troops to clear the way into the main fortified area. The air and artillery preparations are of sufficient length to neutralize any enemy defenses that may survive the nuclear preparation but not so long as to permit remnants of the defenses to recover from the nuclear attack. Artillery and air units attack all known enemy fortifications on a front wider than the main effort sector in order to neutralize enemy positions which can direct flanking fire on the penetration area. Obstacle-clearing groups prepare lanes through minefields and wire entanglements during the night preceding the assault and move forward during the artillery-air preparation to continue obstacle clearance.

342. Defense of Fortified Areas

Aggressor defense of permanently fortified areas is based on the battalion or regimental defensive position. Special battalions are often organized for this purpose. Such battalions are equipped with a high proportion of automatic weapons, medium mortars, and antitank weapons. The defense of permanently fortified areas is conducted in about the same manner as the decentralized position defense.

Section XI. OPERATIONS BY ENCIRCLED FORCES

343. General

Aggressor has specific tactics designed to extricate his forces encircled on the battlefield. These tactics are a combination of defensive-offensive actions.

344. Preliminary Preparation

Aggressor forces which find themselves in a position of imminent encirclement take immediate steps to prepare for an all-round defense. If the possible encirclement is detected in time, all excess units and personnel are evacuated from the area. Stocks of essential supplies, if possible, are built up. In the event the encirclement is accomplished before excess personnel and service units can be evacuated, they are assigned to combat units, especially engineer units. Strong mobile reconnaissance and screening units are placed outside the main defense perimeter to delay the enemy attack as long as possible.

345. Organization of the Defense

a. Depending upon the size of the encircled force, a first echelon

consisting of rifle elements, reinforced with antitank units and an armored reserve, is established. If forces are available, a second echelon, composed primarily of antitank forces, is formed. The armor reserve of the first echelon is a major element of the defense because the success of the operation depends upon successful armor counterattacks. An encircled rifle corps places its entire mechanized rifle division in the armor reserve, reinforcing it with most of the armor from the rifle divisions as well as some of the rifle units.

b. The entire perimeter of the encircled force is not manned. The first echelon established battalion sized strong points along the most likely avenues of approach. Alternate positions are prepared in less dangerous areas. These areas are covered by observation posts and patrols. Antitank strong points are placed in the second echelon behind likely avenues of enemy armor attack. The second echelon is also prepared to occupy first echelon positions if enemy nuclear fires destroy a first echelon unit. The armored reserve is held deep within the encircled area in numerous assembly areas ready for use at any point.

346. Support

a. Units within the encircled area retain control of their artillery. If sufficient artillery is available, a mobile artillery group is formed for additional support for the first echelon units. This group also supports the armor reserve, replaces artillery units destroyed by nuclear fires, and provides fire cover for units and sectors of the perimeter subjected to enemy nuclear attack. When artillery is not available in sufficient quantity to form this group, flank units provide the fires needed by units under attack. All units in the encircled area form antiaircraft artillery groups and a central group is formed for defense of the entire command. Command and logistical installations receive top priority for antiaircraft protection.

b. Engineer units construct fortifications along the most likely avenues of approach and obstacle belts both within and without the area. Wide use is made of available natural materials for obstacles.

c. Air and nuclear support is provided by the command to which the encircled force is subordinate. Air elements are stationed within the encircled area if the area is sufficiently large to contain dispersed airfields. All passive means of protection against nuclear attack are observed and strong protective positions are constructed.

347. Control

Encircled Aggressor forces normally remain under the control of the headquarters which controlled them prior to their encirclement. That command is responsible for the defense and extrication of the encircled forces. Command of the encircled force is exercised by the senior officer present. Radio communication is maintained with the control headquarters and an active air liaison system is established.

348. Conduct of the Defense

a. Detailed defense plans are prepared. These plans include provisions for meeting single or multiple enemy thrusts into the area. In the event of single thrusts, the threatened area is immediately reinforced with additional troops. Antitank and artillery weapons as well as the armored reserve elements counterattack if the enemy succeeds in penetrating the area. The first echelon holds and attempts to beat the enemy back. They withdraw to the second echelon defenses only upon order. Close in nuclear strikes are not used if they require units to withdraw from prepared positions. Nuclear attacks are used to disrupt enemy attack.

b. Simultaneous enemy attacks in several sectors are met by moving perimeter forces, leaving only skeletal defenses in some areas, to the threatened areas. The armor reserve is deployed close to the most threatened sector. Counterattacks are made as soon as possible before the enemy attack can succeed. Such counterattacks are preferably carried out at night supported by nuclear fires. If the enemy attack is halted, the armor reserve drives the enemy back to his former positions. If the enemy attack cannot be completely halted, the armor reserve counterattacks to disrupt the enemy attack. The armor reserve then moves to other threatened sectors. The rifle elements clear up the disrupted enemy attack. Surprise attacks to prevent the enemy from launching his attacks are made if Aggressor forces have sufficient reserves of fuel and ammunition.

349. Organization of the Offensive

a. Encircled Aggressor forces always attempt to break out. The breakout may be accomplished with strong outside support, or with little or no outside support. The breakout with strong outside support is the ideal. A breakout with little outside support is attempted only when the encircled force is small and only a short distance is involved. In both types of breakouts, the enemy is compelled to fight on two fronts, and the time and place of the

breakout are a surprise. The headquarters controlling the encircled force plans the breakout. It is usually planned in conjunction with the overall defense plan.

b. Encircled forces are organized for the breakout into an assault group, a covering force group, a flank security group, and an artillery and reserve group. The assault group forms two echelons, one of armor elements with most of the artillery and all of the nuclear support, and the other of rifle units to mop up enemy bypassed by the first echelon. The covering force group is composed of rifle units reinforced by engineers, chemical warfare troops, and as much field and antitank artillery as can be spared from the assault group. Minimum troops are placed in the flank security group. The artillery and reserve group is usually placed to the rear of the assault group so that it can deliver fire to support either the assault group or the covering forces group.

350. Conduct of the Breakout

Breakout attacks are coordinated with attacks by forces outside of the perimeter. Missions assigned to the assault group of the encircled forces depend upon the distances to friendly units outside the perimeter. When the distance is short, only an initial and final objective are assigned. The final objective is the junction area between the two attacking forces. When distances are greater, specific daily objectives are assigned. The assault group moves into attack positions at the last possible moment. The attack is usually launched at night without any artillery preparation in order to achieve surprise. If the attack starts during daylight, it is preceded by a short intensive artillery, air, and nuclear preparation. The attack of the first echelon of the assault group forms an escape corridor through the enemy positions. Strong enemy resistance is bypassed. These centers of resistance are reduced by the second echelon. The second echelon keeps the escape corridor open. Rear echelon elements form up and move through the corridor as soon as possible. Maximum amounts of equipment and supplies are evacuated. What cannot be moved is destroyed. The covering force withdraws last.

CHAPTER 14
LOGISTICS

Section I. GENERAL

351. Responsibilities

a. Logistics is a command responsibility at all echelons. In every command at regimental and higher levels, the principal assistant to the commander in the field of logistics is the unit Chief of Rear Services who is also designated as an assistant commander. As assistant commander for rear services, he prepares the logistical plans to support the operation and supervises their execution. The chiefs of the technical services assist in logistical planning. The Chief of the Rear Services has direct responsibility for supplies common to all units, general purpose vehicles, and directly controls the intendance, military construction, technical troops of the rear services, medical, and finance troops of the command. He also directs all the activities in the unit rear, including such activities as traffic control, handling of replacement personnel, rear area security and damage control, communications, and control of civilians excepting civil affairs military government. Civil affairs military government functions are under the control of other governmental agencies.

b. The chiefs of artillery, tank and mechanized, airborne engineer, signal and chemical troops, at all levels, are responsible, under the supervision of the unit Chief of Rear Services, for the supply and maintenance of the weapons, equipment, and technical supplies peculiar to their arm. The chief of artillery, in addition, is responsible for the supply of all ammunition, including nuclear ammunition and missiles. The Chief of Rear Services is responsible for the transportation of all supplies and equipment and he directly controls all the noncombat transportation of the unit. In critical situations the commander may authorize him to levy on subordinate units for additional transportation resources.

352. Organization

a. The current organization of rear services at the national level is illustrated in figure 52.

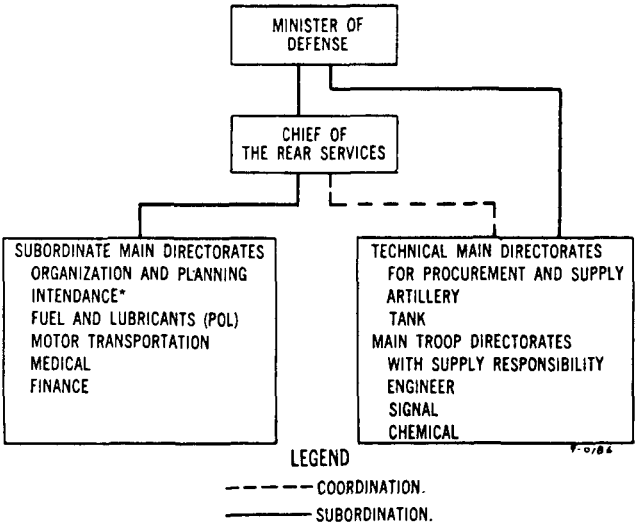


Figure 52. Organization of the rear services.

At this level the Chief of the Rear Services supervises directly those agencies responsible for the procurement, storage, and distribution of supplies and equipment that are common to the ground, naval, and air forces. These supplies include common use categories such as rations, POL, quartermaster supplies, and medical supplies. The supply of combat type items such as weapons, ammunition, and other technical equipment is not a direct function of the Chief of the Rear Services but rather of the chiefs of the technical services. The Chief of the Rear Services coordinates their logistical activities.

b. A similar organization exists at army group, army, division and regimental level. At corps level the corps rear area does not contain logistical facilities of appreciable size. The corps does have a Chief of Rear Services, but he is responsible for provision of logistical support for the nondivisional corps units. He exercises administrative control to insure that the logistical support of the divisions of the corps is adequate and in accord with the corps commander's plan. His organization reflects his reduced responsibilities.

353. Field Supply

a. Aggressor service units and installations of lower echelon units are located relatively far forward, dispersed and as much as possible, camouflaged, and away from possible nuclear targets. Supplies are placed underground or dug in wherever possible.

Rear services personnel prepare plans for damage control. Fire fighting and decontamination are emphasized in damage control planning.

b. Army and army group depots are generally organized into small general depots containing all types of supplies. Large single items of supply depots are avoided. Movement of supplies into army group and army depots are usually made by rail supplemented by truck and pipelines. Movement forward of army depots is usually made by truck supplemented by pipeline where possible. High priority supplies are moved by helicopters and air where possible.

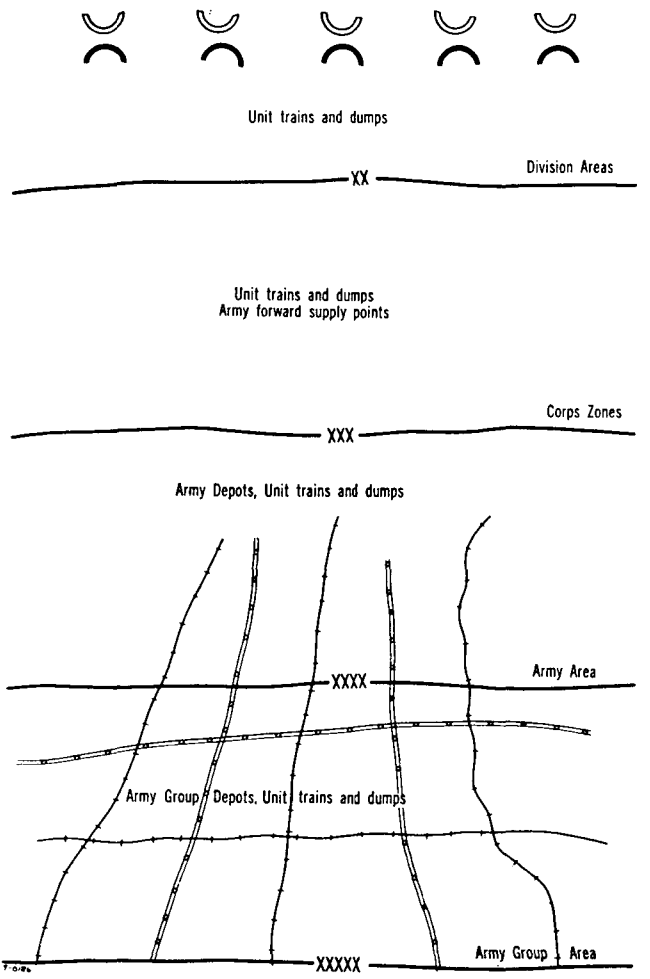


Figure 53. Schematic echelonment of supplies within the Aggresor army group.

Section II. SUPPLY

354. Classes of Supply and Supply Channels

a. Aggressor classes of supply are referred to by type, i.e., Rations, Supplies and Equipment, Fuels and Lubricants (POL), and Weapons and Ammunition.

b. Within the division, except for weapons and ammunition (par. 355), subordinate units look to the division Chief of Rear Services for all supply, and for evacuation and service beyond their organic capabilities. He, in turn, secures the supply of common noncombat items direct from the Chief of Rear Services at army. The supply and maintenance of technical service items are secured from the appropriate technical service at army. In a similar manner, army secures supplies and services from the army group Chief of Rear Services and the army group technical services.

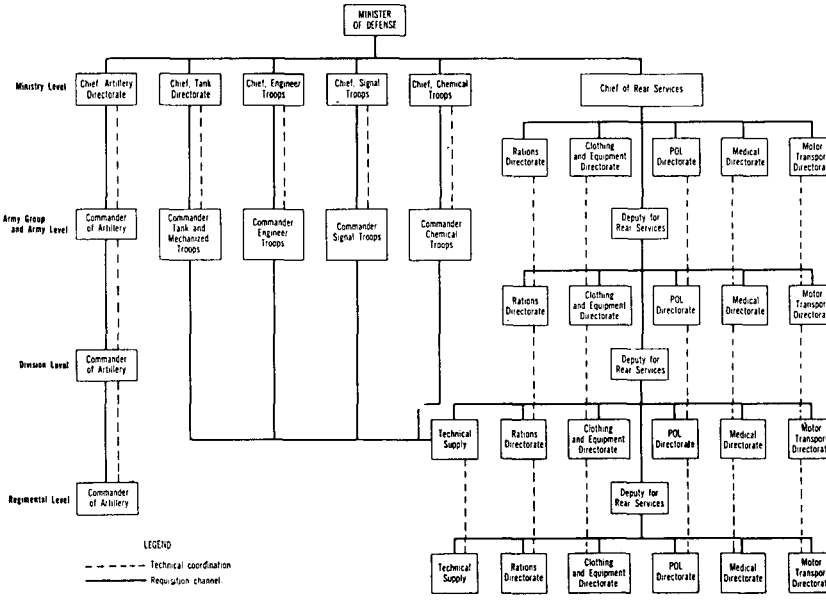


Figure 54. Aggressor supply channels.

355. Weapons and Ammunition Supply System

a. The commander of artillery troops at all echelons down through regiment is responsible for the supply of small arms and artillery materiel and ammunition, except self-propelled guns. Nuclear ammunition follows the same supply channels as all ammunition. Ammunition depots and dumps, as necessary, operate small sections to handle nuclear ammunition. Since these supplies usually have the highest priority for movement forward,

close coordination with rear services transportation elements is necessary. Each artillery staff has a supply and ordnance element. This artillery supply and ordnance element is the channel through which weapons and ammunition are requisitioned and supplied. This element operates artillery depots and repair shops at each level of command and supervises similar activities at the next lower echelon. At corps level the Chief of Artillery Supply is responsible for regulating the flow of artillery supplies to subordinate divisions. He does not operate depots or repair shops.

b. Aggressor measures ammunition requirements in units of fire. A unit of fire is an arbitrary number of rounds per weapon, which varies from weapon to weapon. The basic load for a unit is the amount of ammunition authorized to be in the unit expressed in units of fire. The basic load includes ammunition with the weapon and in unit trains or depots. Ammunition depots are maintained by the army group and army dispersed in their administrative areas. Aggressor maintains reserves of ammunition in those depots equivalent to one unit of fire for the army group or army. In preparation for specific operations, these stocks may be increased to 4 to 6 units of fire. Ammunition is moved into army group, and army depots primarily by rail. It is moved forward to division dumps by rail, where available, or by truck. Within the divisions, ammunition is moved by truck. At each echelon, units maintain reserves of ammunition in unit trains or dumps. Within the division the complete basic load is not always maintained on vehicles, but at times is kept in unit dumps.

c. Listed below are the usual locations of the normal basic loads of ammunition, in short tons, in selected Aggressor organizations:

	One unit of fire	*With weapon*	*In unit trains, depots or dumps*
Rifle Army	13,000	8,000	40,000
Mechanized Army	8,000	5,500	23,000
Rifle Corps	None	2,800	7,500
Rifle Division	1,000	130	1,820
Rifle Regiment	170	100	140
Rifle Battalion	30	20	10
Mechanized Rifle Division	1,600	1,200	3,000
Mechanized Rifle Regiment	240	180	150
Mechanized Rifle Battalion	20	10	10
Tank Division	1,600	1,200	2,900
Tank Regiment	200	200	100
Tank Battalion	60	60	None

356. POL Supply

a. Divisions receive their POL supplies by army tank trucks, or pipelines when available, from army depots. These depots normally stock sufficient POL to refuel all elements of the army twice.

In preparation for specific operations, army depots may build up their refueling capability to three or four times the amount required to refuel all elements of the army. When the main POL depots are more than 60 miles from the front, special forward POL points are established. At army and army group POL depots and supply points, fuel is stored in 10- to 15-ton tanks. Oil and lubricants are stored in 40- to 130-gallon drums. Divisions use tank trucks and 50-gallon drums for supply within the division. In addition to maintaining full tanks on all vehicles, the division maintains varying reserves of POL in their dumps. The rifle division retains in its POL dump enough POL reserves to refuel the division units once. Subordinate elements within the rifle division will have a one-half refueling capability in their unit dumps. The mechanized rifle and tank divisions retain reserves sufficient to refuel their units 1½ times. Reserves in their regiments are sufficient to refuel regimental elements up to 70 percent of capacity.

b. Corps does not maintain POL reserves. However, all nondivisional corps elements retain fuel reserves in their unit dumps as stated above.

357. Ration and Water Supply

a. The exploitation of local ration resources is a standard practice in the Aggressor army, particularly for perishable rations. The regular ration averages 5.5 to 5.7 pounds. A special dry ration of about 2 pounds is used as an emergency ration. Rations are normally distributed throughout the Aggressor army as follows:

(1) Army Depots—5 dry and 5 regular rations.

(2) Corps—There are no corps depots. Units within the corps hold reserves as shown below.

(3) Division Dumps—Approximately 4 rations.

(4) Regimental Dumps—Approximately 2½ rations.

(5) Battalion or smaller units—1 ration.

b. Unit engineers operate water supply points.

358. General Purpose Transportation and Combat Vehicles

General purpose transportation vehicles are supplied by the Main Administration of motor transport, a subordinate agency of the Chief of Rear Services. Combat vehicles are furnished by the headquarters of the tank and mechanized troops. Prime movers are furnished by the artillery chief of the army or army group command. Below army, all vehicles are supplied through the

motor transportation supply element of the rear services headquarters. Agencies that supply vehicles are also responsible for providing for the maintenance beyond unit capabilities.

359. Specialized Equipment

Specialized equipment is furnished by the technical service concerned. At division level, most of the specialized equipment is supplied by a technical section under the Chief of Rear Services.

Section III. REPAIR AND MAINTENANCE

360. General

Unit repair shops are organized to repair all types of combat materiel and armament. Mobile shops are assigned to unit service elements. Units are expected to salvage any of their equipment that is disabled in combat. Equipment exposed to nuclear contamination is evacuated to decontamination points for cleaning and then to repair shops for repair or salvage. Collection, salvage and evacuation of Aggressor and enemy materiel are the responsibility of salvage agencies subordinate to the rear services at divison and higher echelons.

361. Field Maintenance

a. Combat vehicles are maintained and repaired by elements of the tank and mechanized troops. General purpose vehicles are serviced by motor transportation elements of the rear services. In rifle divisions and rifle regiments, both functions are performed by small motor maintenance sections subordinate to the rear services. Special attention is given to the maintenance and evacuation of tanks. Unit replacement is emphasized. Mechanic teams service tank companies; workshop platoons service battalions; and larger units service regiments and divisions. Armies have larger units for more extensive repairs. Aggressor preventive maintenance for armored vehicles approximates United States practices. Second echelon maintenance is performed by regiments and battalions after a vehicle has been in operation for 9,000 miles. Third echelon maintenance is performed in regiments and divisions after operation for 18,000 miles.

b. Aggressor pays particular attention to the operation of armored vehicles in winter. Preheating devices for fuel injectors and motors are installed in tanks that are to operate in extremely cold areas. Coils carrying heated water are installed in crew compartments. Idlers and bogies are cleaned and tracks are loosened for movement over ice and snow.

c. The Chief of Artillery at each level is responsible for weapons maintenance and repair. An echelon system similar to that used for vehicle repair is used. Artillery weapons are repaired at all echelons. Division level workshops perform light and partial medium repair of weapons and equipment. Mobile shops make emergency repairs in combat areas but division workshops are usually located at division supply points and repairs are made there. At the army level, mobile repair shops function under the weapons-repair group of the artillery supply section. Armorers in those shops replace major parts and assemblies, dismantle damaged weapons, make parts, and do other similar repair work. Medium repairs on infantry and artillery weapons at army level are performed in rail-mounted shops. Major repairs are performed in the homeland.

Section IV. MEDICAL EVACUATION

362. General

The mission of the Aggressor Army Medical Service is to bring medical aid as far forward as possible and to expedite the evacuation of casualties. In addition, the service is responsible for epidemic control, for general preventive medicine, for the maintenance of sanitary conditions, and for the inspection of food and water supply.

363. Organization

At ministerial level the Chief of the Rear Services administers the medical activities of the Aggressor army through the Main Directorate of Medical Service. During wartime, general and specialized hospitals are located in the zone of the interior and at army group and army levels. The Ministry of Health controls hospitals in the zone of the interior. Mobile hospitals are organized at division level. The evacuation chain extends from these hospitals forward through the various unit echelons to company level. Corps headquarters normally have no medical facilities. Each combat division has a small medical battalion. Regimental medical units provide medical platoons to battalions. Aid men from the battalion medical platoon are made available to each company. Casualties are evacuated by the higher unit in the chain of command, except the rifle corps. Available Army transport moving to the rear is used for this purpose.

364. Treatment of Casualties

Aggressor field medical installations provide immediate medical aid to casualties. Usually, only first aid is given at the company

level, and casualties are moved to battalion medical points as soon as practicable. Actual medical treatment starts at the battalion medical point. Evacuation from there to higher echelons is expedited. Hospitals are maintained as far forward as possible to speed treatment.

365. Evacuation

a. Casualties are evacuated from the company area to the battalion medical point by litter bearers. Generally four litter bearers are made available to each company. The regimental medical company evacuates casualties from the battalion to the regimental medical point. The company uses its own ambulances and any other available transportation, including helicopters. Regimental medical points usually are located from 1 to 3 miles behind the line of contact. The regimental medical point classifies and tags casualties, checks and changes bandages, provides emergency surgical treatment, and cares for patients who cannot be evacuated safely. Casualties are assigned priority tags to indicate the order in which they are to be evacuated.

b. The division medical battalion is established about 6 miles from the line of contact. This unit is responsible for evacuating casualties from the regimental medical points to the division medical points or to attached surgical hospitals located 15 to 20 miles behind the line of contact. Major surgery is performed at both the divisional medical point and at the mobile hospitals. Casualties expected to recover within about 3 days are normally not evacuated beyond the division. The more seriously wounded or ill are sent to army clearing stations usually located near the main roads. From there, they pass to army hospitals in the army rear areas. At these installations, casualties expected to recover within 30 days are retained and the remainder are sent on to either army group hospitals or hospitals operated by the Ministry of Health.

CHAPTER 15
REFERENCE DATA

Section I. AGGRESSOR WEAPONS

366. Small Arms

a. The rifle is semiautomatic and similar to the US M–1. The light machinegun is a BAR-type automatic weapon. The heavy machinegun is simply constructed, air-cooled, and belt-fed. The barrel of this machinegun can be changed in a few seconds. The submachinegun is similar in design to the US M–3 submachinegun. All Aggressor small arms fire the same cartridge.

b.

Type	*Effective range in meters*
Submachinegun	Up to 180
Light machinegun	Up to 730
Heavy machinegun	Up to 1,000
Rifle	Up to 550
Pistol	Up to 50

367. Mortars

Weapon	*Maximum range meters*	*Transportation*
81-mm	3,600	Hand carry, hand-drawn cart, within a vehicle.
120-mm	5,500	Vehicle towed by means of a muzzle clamp.
150-mm	7,300	Vehicle towed by means of a muzzle clamp.
220-mm*	9,000	Vehicle towed by means of a muzzle clamp.

* This weapon can fire nuclear rounds with yields of 0.5 KT, 1 KT or 2 KT.

368. Field Artillery (Towed Cannon)

Weapon	*Maximum range (meters)*	*Penetration centimeters, 450 meters, at 0°*
80-mm gun[1]	18,000	12.7
120-mm howitzer	13,000	
120-mm gun	22,000	22.9
150-mm howitzer	15,500	
150-mm gun	32,000	
205-mm gun-howitzer[2]	24,500	

[1] Has an auxiliary engine which permits movement for short distances without a prime mover. Can be employed for indirect or antitank fire.

[2] This weapon can fire nuclear rounds with yields of 0.5 KT, 1 KT, 2 KT or 5 KT.

369. Self-Propelled Artillery (Cannon)

a. All Aggressor self-propelled artillery, unless otherwise specified, is heavily armored and can exist on the tank-to-tank battlefield. Essentially, they are tanks with nonrevolving turrets. Guns of 120-mm caliber, or greater, are mounted on modified heavy tank chassis. Guns of smaller caliber are mounted on modified medium tank chassis.

b.

Weapon	*Maximum range (meters)*	*Penetration centimeters, 450 meters, at 0°*
80-mm self-propelled gun	18,000	12.7
105-mm self-propelled gun	16,500	15.8
120-mm self-propelled gun	16,500	22.9
300-mm gun*		

* This weapon is not armored. It can fire nuclear rounds with yields of 10 KT, 20 KT, or 50 KT.

370. Antitank Artillery and Recoilless Rifles

a. All Aggressor antitank artillery guns, except the 55-mm gun, can be employed for indirect fires. Recoilless rifles fire antipersonnel ammunition (canister type) as well as armor-piercing ammunition.

b.

Weapon	*Maximum range (meters)*	*Penetration centimeters, 450 meters, at 0°*
55-mm antitank gun[1, 2]	9,000	10.1
80-mm gun[2]	18,000	12.7
105-mm antitank gun[2]	16,500	15.8
80-mm recoilless rifle[3]	1,800 (direct fire) 4,500 (indirect fire)	15.8
80-mm recoilless rifle[3]	1,800 (direct fire) 6,500 (indirect fire)	26.4
80-mm rocket launcher[4]	100	20.3

[1] May be towed or mounted in a lightly armored tracked carrier or in a wheeled vehicle without change in ballistic characteristics.

[2] Has an auxiliary engine which permits moving the piece for short distances without a prime mover.

[3] Equipped with a two-wheeled mount for towing.

[4] Squad antitank weapon, fires shaped charge.

371. Antiaircraft Artillery

Weapon	*Maximum rate of fire rnd per min*	*Maximum effective vertical range in meters*	*Maximum effective horizontal range in meters*
15-mm (squad)[1]	2,400	975	1,400
15-mm (twin)	1,200	975	1,400
40-mm antiaircraft gun	120	1,600	5,000 HE

Weapon	Maximum rate of fire rnd per min	Maximum effective vertical range in meters	Maximum effective horizontal range in meters
55-mm antiaircraft gun[2]	150	4,500 (off carriage radar control). 2,000 (on carriage control). 10,500 (radar control).	1,800 AP 9,000 13,000
80-mm antiaircraft gun	20	12,000	18,280
105-mm antiaircraft gun	15	14,000 (radar control).	23,000
Surface-to-air-missile[3], [6] (SALLY)	15	10,000	20,000
Surface-to-air-missile[4], [6] (SAMMY)	1	19,000	42,000 (25 miles).
Surface-to-air-missile[5], [6] (SARAH)	0.5	30,000	130,000 (80 miles).

[1] May appear in towed or self-propelled version.

[2] Also appears in a twin version mounted in a modified medium tank chassis. This version is issued to mechanized and tank units.

[3] The SALLY is a single stage solid fuel propellant missile designed for low altitude protection. The missile and its associated equipment are normally mounted in the amphibious armored carrier (AC3) described in paragraph 377. For airborne operations the SALLY and its associated equipment are mounted in light trucks. A SALLY battery can engage up to five targets simultaneously. SALLY does *not* have a surface-to-surface capability.

[4] The SAMMY is a two stage solid fuel propellant missile. It can be employed from field or permanent installations. SAMMY can engage airborne targets above the radar horizon. The fire control system has a capacity of 25 simultaneous targets at maximum altitude and range. The missile can also be used for surface-to-surface fires but only at the rate of one missile per battery every five minutes. SAMMY can fire a nuclear warhead of 0.5 KT, 1 KT or 2 KT.

[5] The SARAH is a two stage solid fuel propellant missile. It can be employed from field or permanent installations. The missile is designed for high altitudes and long range surface-to-air missions. SARAH can fire a nuclear warhead of 2KT or 10KT and can also be used for surface-to-surface fires.

[6] The SALLY missile is named BULTURO by Aggressor.
The SAMMY missile is named SAGO by Aggressor.
The SARAH missile is named AGLO by Aggressor.

372. Artillery Rocket Launchers (Nonnuclear)

Type of weapons	Number of rockets	Maximum range (meters)	Mount
150-mm rocket launcher	16	9,000	6x6 truck chassis
250-mm rocket launcher	12	9,000	High speed tractor

373. Artillery Rockets (Nuclear)

Weapon	Range	Mount	Yield	Minimum time between successive rounds
ROCKO[3]	5-15 miles	Full-tracked amphibious tank chassis[1].	2, 10, 20 KT	30 min.
RUDY[3]	10-50	Heavy tank chassis[2].	10, 20, 50, 100 KT	40 min.

[1] Cannot be fired while afloat.

[2] Rocket is raised to vertical position by hydraulic jacks for firing.

[3] ROCKO is named NERONO by Aggressor.
RUDY is named KOLOSSO by Aggressor.

374. Artillery Ballistic Missiles (Nuclear)

a. All Aggressor ballistic missiles can also fire high explosive warheads. MICKY and MASHA missiles employ solid fuel propellents; MORRIS and MOE employ liquid fuel propellents.

b.

Weapon	*Range*	*Mount*	*Yield*	*Minimum time between successive rounds*
MICKY [3]	50–150 miles (80–240 km).	Heavy tank chassis.[1]	10, 20, 50, 100, 200, and 500 KT; 1, 5 MT	1 hr
MASHA [3]	150–350 miles (240–560 km).	Towed on high speed trailer.	50, 100, 200, and 500 KT; 1, 5, MT	2 hr
MORRIS [2, 3]	350–1500 miles (560–2400 km).		100, 200 KT 500 KT, 1 MT, 5 MT	6 hr
MOE [2, 3]	1500–6000 miles (2400–9600 km).		500 KT; 1, 5, 20 MT	6 hr

[1] The missile is carried in an external container.
The missile has a built-in pedestal for vertical launching.
[2] Requires permanent installation for firing.
[3] MICKY is named TONDRO by Aggressor.
MASHA is named FULMO by Aggressor.
MORRIS is named SUPRO by Aggressor.
MOE is named TERURO by Aggressor.

375. Tanks

a. Fuel. All Aggressor tanks use diesel fuel. Angles of armor increase protective effectiveness, particularly on turrets and front hull.

b. General

Type	*Main armament*	*Maximum road speed*	*Maximum range (in board fuel)*	*Penetration centimeters, 450 mtrs at 0°*	*Weight (tons)*
Heavy	120-mm gun	30 MPH	140 miles	23	54
Medium	105-mm gun	30 MPH	250 miles	18	40
Amphibious	30-mm gun	25 MPH [1]	160 miles	13	16

[1] Water speed is 6 MPH.

c. Armor Thickness, Inches.

Type	*Turret*	*Front*	*Side*
Heavy	10 centimeters	10 centimeters	6 centimeters
Medium	7.5 centimeters	7.5 centimeters	4 centimeters
Amphibious	4 centimeters	4 centimeters	2 centimeters

Section II. AGGRESSOR EQUIPMENT

376. Helicopters

a.

Maximum speed with full load	*Maximum range in miles with full load*	*Capacity with full load in tons or passenger combat equipped personnel or litter cases*		
		Tons	*Pass*	*Litters*
Light helicopter (H–1) 85 knots	180		[1] 1	
Light helicopter (H–2) 115 knots	190	[3, 4]	3	[2] 3
Medium helicopter (H–3) 110 knots	200	[3, 4] 2.	16	8
Heavy helicopter (H–4) 120 knots	220	[3, 4] 4.5	40	20
Very heavy helicopter (H–5) 150 knots	250	[3, 4] 7.5	60	30

[1] Pilot only. H–1 can land on water.

[2] Equipped with pods to carry two litter casualties externally.

[3] Capable of carrying 80-mm gun and trucks comparable to US ¼-ton truck.

[4] Equipped with rear ramp for rapid loading and unloading.

b.

(1) The light helicopter (H–2) and the medium helicopter (H–3) can be equipped with machineguns and rockets up to 5 inches in diameter.

(2) The light helicopter (H–2), the medium helicopter (H–3), and the heavy helicopter (H–4) can be equipped with external bomb racks. Total bomb capacity is approximately 50 percent of the maximum rated cargo capacity.

377. Armored Carriers

a. Aggressor armored carriers do not have permanent armored overhead covers. They can be fitted with blanket-type overhead covers that afford protection against shell fragments. All Aggressor armored carriers can be armed with machineguns, equipped with radios, and can be used as a prime mover.

b.

Type	*Passenger capacity*	*Road speed*	*Armor thickness*
Light armored carrier, 4x4 (AC 1).	10	50 MPH	1.25 centimeters
Medium armored carrier, 6x6 (AC 2)[1].	14	40 MPH	1.25 centimeters
Amphibious armored carrier (AC 3)[2].	20	25 MPH	1.25 centimeters

[1] Limited standard. Found in Aggressor satellite forces. Aggressor forces are equipped with the amphibious armord carrier (AC 3).

[2] Track-laying vehicle. Water speed is 6 MPH.

378. Amphibious Vehicle

Type	Road speed	Water speed	Passenger capacity	Cargo capacity
Light amphibious truck, 4x4 [3](BEETLE).	40 MPH	3 MPH	3	400 lb
Medium amphibious truck, 6x6 [1, 3](BUG).	50 MPH	6 MPH	20	3 tons
Tracked amphibious vehicle [1, 2, 3](SPIDER).	25 MPH	11 MPH	50	7 tons

[1] Equipped with tail gate and ramp to facilitate loading.
[2] Can carry an 80-mm gun with crew and light prime mover.
[3] BEETLE is named LACERTO by Aggressor.
BUG is named LIMO by Aggressor.
SPIDER is named ARANEO by Aggressor.

379. Aircraft

Type	Engine	Maximum speed	Maximum range
Fighter [1,4] (LEE).	Single jet	850 knots	800 miles
Attack [1, 2, 4] (WASP).	Single jet	750 knots	600 miles
Bomber [3, 4] (CHUCK)	Twin jet	900 knots	1,000 miles
Transport [4] (HAULER).	Twin jet	650 knots	3,000 miles
Artillery Observation (PEEPER).	Turboprop	275 knots	400 miles

[1] May be used for photographic reconnaissance.
[2] Capable of carrying nuclear bomb externally.
[3] Capable of carrying nuclear bombs.
[4] LEE is named PAFAJO by Aggressor.
WASP is named DETRUIJO by Aggressor.
CHUCK is named FORVISO by Aggressor.
HAULER is named PORTIJO by Aggressor.
PEEPER is named VIDO by Aggressor.

Section III. SELECTED AGGRESSOR UNIT TABLES OF PRINCIPAL WEAPONS AND TRANSPORTATION

380. Tables of Weapons and Transportation

The following tables list the principal weapons and transportation of selected Aggressor organizations:

Table X. Rifle Regiment, Rifle Division, Principal Weapons and Transportation

Unit	Small arms					Mort		AA			AT					Armd veh		Trans	
	Rifles	Pistols	SMG	LMG	HMG	81-mm	120-mm	15-mm MG (dual)	15-mm MG (quad)	40-mm gun	80-mm launcher (squad)	80-mm recoilless	105-mm recoilless	55-mm gun (aux propelled)	80-mm gun (aux propelled)	Armored carrier (AC 1, 2 or 3)	80-mm SP gun	Motorcycles	Trucks
Rifle Bn (3)	1302	231	240	99	36	18		13			81	18		12		39		3	102
AA Bn	86	20	24					6	6	6									14
SP Gun Co	45	8	7													4	6		1
AT Co	45	8	7												6	5			7
Recoilless Rifle Co	40	8	7										6						7
Mort Co	50	8	7				6									6			7
Recon Co	37	8	14	6												7			2
Signal Co	56	10	8													2			4
Engineer Co	42	8	4													1			2
Others	255	48	40	1	1			1								2*			24
Total	1958	357	348	106	37	18	6	25	6	6	81	18	6	12	6	66	6	3	170

* Cml Platoon

Table XI. Rifle Battalion, Rifle Regiment, Principal Weapons and Transportation

Unit	Small arms					Mort	AA		AT			Armd veh	Trans	
	Rifles	Pistols	SMG	LMG (8-mm)	HMG (15-mm)	81-mm	15-mm MG (dual)	15-mm MG (quad)	80-mm launcher (squad)	55-mm gun	80-mm recoilless rifle	Armored carrier (AC 1)	Motorcycles	Trucks
Rifle Co (3)	225	24	36	27	9				27			12		
AAMG Co	30	9	6				6	2						6
MG Co	25	10	15	6	3									6
Mort Co	36	8	10			6								7
AT Co	40	10	13							4	6			7
H & S Co	44	16										1	1	8
Total	401	77	80	33	12	6	6	2	27	4	6	13	1	34

Table XII. Medium Tank and Self-Propelled Gun Regiment, Rifle Division, Principal Weapons and Transportation

Unit	Small arms				AA	Armored vehicles				Trans	
	Rifles	Pistols	Submachine guns	LMG	15-mm MG (dual)	Tank, medium	Tank retriever	Armored carrier (AC 2)	105-mm SP gun	Motorcycles	Trucks
Tank Cos (4)	104	40	136			64					4
SP gun Co (2)	34	16	48						22		2
Trans Co	41	8	10								53
Recon Plat	16	2	13	2	1			5		3	
Hq Co	27	72	22			2		2		2	12
Svc Co	79	12	20				3				14
Total	301	150	249	2	1	66	3	7	22	5	85

Table XIII. Division Artillery, Rifle Division, Principal Weapons and Transportation

Unit	Small arms				AA				AT	Arty			Vehicles
	Rifles	Pistols	Submachine guns	LMG	15-mm MG (dual)	15-mm MG (quad)	55-mm gun	80-mm gun	80-mm SP gun	150-mm mortars	120-mm how	80-mm gun	Trucks
Arty regt	1096	250	24	30						12	36	12	220
AA regt	531	52	99		4	2	24	12					97
AT bn	161	20	33	6					12				33
H & S Btry	40	25	20										10
Survey Btry	42	20	8										4
Total	1870	367	184	36	4	2	24	12	12	12	36	12	364

Table XIV. Antiaircraft Artillery Regiment (Rifle, Mechanized, Rifle and Tank Divisions) Principal Weapons and Transportation

Unit	Small arms			AA				Fire control			Vehicles	
	Rifle	Pistol	Submachine gun	15-mm MG (dual)	15-mm MG (quad)	55-mm gun	80-mm gun	Fire control radar	Generators	Dir/Hgt & range finder	Trucks	Motorcycles
Gun Btry, 55-mm (4)	296	16	44	4		24		4	4	4	44	
Gun Btry, 80-mm (2)	168	8	22		2		12	2	2	2	22	
Hq Btry	39	25	11								9	2
Svc Btry	28	3	22								22	
Total	531	52	99	4	2	24*	12	6	6	6	97	2

* Tank & Mechanized Divisions have 55-mm SP Guns.

Table XV. Artillery Regiment, Rifle Division, Principal Weapons and Transportation

Unit	Small arms				Artillery			Trans
	Rifle	Pistols	Submachine guns	LMG	150-mm mortar	120-howitzer	80-mm gun	Trucks
How Bn (3)	588	114		18		36		90
Gun Bn	196	38		6			12	30
Mortar Bn	196	38		6	8			30
Hq & Svc Btry	116	60	24					70
Total	1096	250	24	30	8	36	12	220

Table XVI. Anti-tank Artillery Battalion, Rifle Division, Principal Weapons and Transportation

Unit	Small arms				At	Trans
	Rifle	Pistols	Submachine guns	LMG	80-mm gun	Trucks
AT Btry (3)	75	9	21	3	12	21
Hq Btry	45	8	4	2		4
Svc Btry	41	3	8	1		8
Total	161	20	33	6	12	33

Table XVII. Reconnaissance Battalion, Rifle, Mechanized Rifle and Tank Divisions, Principal Weapons and Transportation

Unit	Small arms					AA	AT	Armored vehicles				Trans	
	Rifle	Pistols	Submachine gun	LMG	HMG	15-mm MG (dual)	80-mm launcher (squad)	Tank, amphibious	Tank, med	Tank retriever	Armored carrier (AC2)	Motorcycles	Trucks
Tank Co	19	6	35					5	11			1	1
Motorcycle Co	44	6	26	21	1						1	22	1
AC Co	90	6	35		13	3	15				16	1	1
Hq Co	28	10	12		3						4	1	5
Svc Co	5	1	35		4					1	3		10
Total	186	29	143	21	21	3	15	5	11	1	24	25	18

Table XVIII. Mechanized Rifle Regiment, Mechanized Rifle Division, Principal Weapons and Transportation

Unit	Small arms					Mort	AA			AT					Armored vehicles						Trans	
	Rifles	Pistols	SMG	LMG	HMG	120-mm mortar	15-mm AAMG (dual)	15-mm AAMG (quad)	55-mm SP	80-mm SP gun	55-mm SP gun	80-mm recoilless rifle	105-mm recoilless rifle	80-mm launcher	Tank, amphibious	Tank, medium	Tank retriever	Armored carrier (AC1)	Armored carrier (AC2)	Assault gun 120-mm	Motorcycles	Trucks
Mech Rifle Bn (3)	714	192	525	108	18		15				12	12	6	81					87			39
Tank Bn (Med)	111	60	143				1									34	2	3	1	11	5	18
Arty Bn	88	56	64			6	1	6	6	6	6											20
Signal Co	39	10	16																3			5
Recon Co	33	10	42	4			2								5			7			8	3
Transportation Co	20	5	50																			50
H & S	103	92	52				3										1		4		2	20
Total	1108	425	892	112	18	6	22	6	6	6	18	12	6	81	5	34	3	10	95	11	15	155

Table XIX. Mechanized Rifle Battalion, Mechanized Rifle Regiment Principal Weapons and Transportation

Unit	Small arms					AA	AT				Armd veh	Trans
	Rifles	Pistols	SMG	LMG	HMG	15-mm AA MG (dual)	80-mm launcher (squad)	80-mm recoilless rifle	105-mm recoilless rifle	55-mm SP gun	Armored carrier (AC2)	Trucks
Mech Rifle Co (3)	150	30	135	36			27				18	30
MG Co	26	8	6		6						3	
AT Co	29	10	6					4	2	4	2	1
H & S Co	33	16	28			5					6	8
Total	238	64	175	36	6	5	27	4	2	4	29	39

Table XX. Heavy Tank & Self-Propelled Gun Regiment, Mechanized Rifle & Tank Divisions, Principal Weapons and Transportation

Unit	Small arms				AA		AT	Armored vehicles					Vehicles	
	Rifle	Pistol	Submachine gun	LMG	15-mm MG (dual)	55-mm gun (SP)	80-mm launcher (squad)	Heavy tank, 120-mm	Tank retriever	Armored carrier (AC1)	Armored carrier (AC2)	120-mm SP gun	Trucks	Motorcycles
Heavy Tank Bn (2)	180	30	130					44					16	10
SP Gun Bn	88	15	67		1							22	9	5
AA Co	41	4	24			6							12	
Mech Rifle Co	67	5	22	12			9				6		2	
Svc Co	113	8	67						3		3		64	
Hq Co	21	35	29					2		6	4		12	5
Total	510	97	339	12	1	6	9	46	3	6	13	22	115	20

Table XXI. Medium Tank Regiment, Mechanized Rifle and Tank Divisions, Principal Weapons and Transportation

Unit	Small arms				AA		AT	Armored vehicles					Trans	
	Rifle	Pistols	Submachine guns	LMG	15-mm MG (dual)	55-mm SP gun	80-mm launcher (squad)	Tank, amphibious	Tank, medium	Tank retriever	Armored carrier (AC1)	Armored carrier (AC2)	Motorcycles	Trucks
Tank Bn (3)	234	60	261						102		6		3	21
Signal Co	29	6	8									2		4
Recon Co	37	8	37					5	5		5		5	1
Mech Rifle Co	43	9	45	9			9					6		
AA Btry	44	6	4		1	6						1		1
Trans Co	30	8	21											53
H & S Co	123	16	59						2	3	2	1	2	23
Total	540	113	435	9	1	6	9	5	109	3	13	10	10	103

Table XXII. Medium Tank Battalion, Medium Tank Regiment, Mechanized Rifle and Tank Divisions, Principal Weapons and Transportation

Unit	Small arms			Armored vehicles		Trans	
	Rifle	Pistols	Submachine guns	Tank, medium	Armored carrier (AC-1)	Motorcycles	Trucks
Tank Co (2)	60	10	68	32			2
Hq & Sv	18	10	19	2	2	1	5
Total	78	20	87	34	2	1	7

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Table XXIII. Division Artillery, Mechanized Rifle Division, Principal Weapons and Transportation

Unit	Small arms				AA				Arty			Mortars	Veh
	Rifles	Pistols	Submachine guns	LMG	15-mm MG (dual)	15-mm MG (quad)	55-mm SP gun (dual)	80-mm gun	80-mm gun	120-mm how	150-mm R/L	150-mm	Trucks
Arty regt (Mortar)	682	154	18	18						24		12	150
Arty regt (Gun)	682	154	18	18					12	24			150
RL bn	178	42	53	6							18		42
AA Regt	531	52	99		4	2	24	12					97
H & S Btry	40	35	10										10
Total	2113	437	198	42	4	2	24	12	12	48	18	12	449

Table XXIV. Artillery Regiment, Mechanized Rifle and Tank Divisions, Principal Weapons and Transportation

Unit	Small arms				Mortars	Arty		Trans
	Rifle	Pistols	Submachine guns	LMG	150-mm mortar	120-mm howitzer	80-mm gun	Trucks
Howitzer Bn (2)	392	76		12		24		60
Gun Bn	196	38		6			12	30
or								
(Mortar Bn)	(196)	(38)		(6)	(12)			(30)
Hq & Svc Btry	94	40	18					60
Total	682	154	18	18	(12)	24	12	150

Table XXV. Rocket Launcher Battalion, Mechanized Rifle Division, Principal Weapons and Transportation

Unit	Small arms				Rocket launchers	Veh
	Rifles	Pistols	Submachine guns	LMG	150-mm R/L, truck mtd	Trucks
Rocket Launcher Btry (3)	84	27	42	6	18	18
Hq & Svc Btry	94	15	11			24
Total	178	42	53	6	18	42

Table XXVI. Rocket Launcher Battalion, Tank Division, Principal Weapons and Transportation

Unit	Small arms				Rocket launchers	Trucks
	Rifles	Pistols	Submachine guns	LMG	150-mm R/L, truck mtd	Trucks
Rocket Launcher Btry (2)	56	18	28	4	12	12
Hq & Svc Btry	94	15	11			24
Total	150	33	39	4	12	36

Table XXVII. Airborne Rifle Battalion (Parachute or Glider), Airborne Division, Principal Weapons and Transportation

Unit	Small arms					Mort	AA	AT			Trans	
	Rifles	Pistols	SMG	LMG	HMG	81-mm	15-mm MG	80-mm launcher (squad)	55-mm gun	80-mm recoilless rifle	Motorcycles	Trucks
Rifle Co (3)	227	25	36	27	9			27				
AAMG Co	30	8	6				6					6
MG Co	24	10	15	6	3							6
Mort Co	36	8	10			6						7
AT Co	40	10	13						3	6		7
H & S Co	44	16									1	8
Totals	401	77	80	33	12	6	6	27	3	6	1	34

Table XXVIII. Typical Antiaircraft Artillery Division Principal Weapons

Unit	AA				
	15-mm MG	55-mm gun	105-mm gun	SAMMY msl	SALLY msl
Gun Regt (1)	4		24		
Gun Btry			(6)		
SALLY Msl Bn					30
Msl Btry					(15)
SAMMY Msl Bn				24	
Msl Btry				(12)	
AW Regt (1)	4	24			
AW Btry		(6)			
Total	8	24	24	24	30

Section IV. AGGRESSOR TIME AND SPACE FACTORS

381. General

a. Calculations. Tables XXX, XXXI, and XXXII give time and space factors for units of the rifle, mechanized rifle, and tank divisions, respectively. If the strength in personnel and vehicles of other units is known, time and space factors may be readily determined through use of basic road spaces as shown in paragraph 382.

b. Explanation of Factors. Factors given are based on Aggressor marching capabilities under the following conditions:

(1) Favorable weather and terrain.
(2) Troops physically fit and trained in the type of march which is under consideration.
(3) Road marches made on average improved roads.
(4) No interference with the march because of enemy actions or threats.

382. Basic Road Spaces

a. Foot Troops. The following factors for foot troops are based on an average distance of 2 yards between men for route marches and 5 yards for tactical marches:

Formation	*Yards per man*	
	Route march	*Tactical march*
Single file	3.0	6.0
Column of twos	1.5	3.0
Column of threes	1.2	2.0
Column of fours	1.0	1.5

b. Vehicles. The following road spaces are the lengths to the

nearest yard of individual vehicles commonly employed by Aggressor.

Vehicle	*Road space yards*
Armored carrier	5
Motorcycle	3
Tanks:	
Heavy	11
Heavy, with towed load	15
Medium	10
Medium, with towed load	14
Tractor, heavy, with towed load	9
Tractor, medium, with towed load	9
Trucks:	
Average for all trucks	8
Average for all trucks with towed load	11
Weapons, self-propelled:	
80-mm self-propelled gun	9
105-mm self-propelled gun	10
120-mm self-propelled gun	11
Average per vehicle in mixed column	10

c. Use of Basic Road Space Tables.

(1) Foot elements of a rifle battalion marching under tactical conditions in column of twos will occupy a road space of 393 × 3.0 (*a* above) = 1,179 yards.

(2) To determine the road space of a column of vehicles—

(*a*) Multiply the number of each type of vehicle by the road space (*b* above) of each vehicle of that type.

(*b*) Add the products thus obtained.

(*c*) Multiply the distance in yards between vehicles by the total number of vehicles less one.

(*d*) Add (*b*) and (*c*).

(*e*) An alternative and more rapid solution is to multiply the average length per vehicle in a mixed column (10 yards) by the total number of vehicles, and add the resultant product to the total distance in yards between vehicles ((*c*) above).

(3) Normally, the distance in yards between vehicles will equal the speedometer reading (miles per hour) multiplied by a speedometer multiplier (SM) of 2 for night marches and an SM of 4 for daylight marches.

383. Rates, Length of Marches, and General Rules

a. Under Favorable Conditions (table XXIX).

b. Marches in Snow.

(1) Foot troops marching in snow will have their rate of march decreased depending on the varying nature and depth of the snow. Normally snow of 2 feet or more in

Table XXIX. Rates of March (Time and Space Factors)

Column	1	2	3	4	5	6	7
Line	Type unit	Rate of march MPH [1]				Lengths of march on road (daily average) [2]	Forced march
		On roads		Cross-country			
		Day	Night	Day	Night		
1	Foot troops [4]	2½	2	1½	1	20	[3] 30
2	Cavalry and pack [5]	3½	3	3	2	28–30	40–45
3	Artillery, towed	20	15	10	6	150–175	240–265
4	Motorized [6]	20	15	10	6	190–220	300–350
5	Tanks and SP guns [7]	15	10	6	4	120–140	180–200
6	Armored carrier personnel.	25	15	10	6	190–220	300–350
7	Motorcycles	40	15	10	----------	310–350	475–525
8	Individual trucks	30	15	15	6	190–220	300–350

1 Rate of march is average speed over a period of time including halts.
2 Average day's march is 8 hours.
3 Forced march is calculated at average rates for 12 hours' marching time.
4 For movement over mountainous terrain add 1 hour for each 1,000 feet of climb or 1,500 feet for descent.
5 Includes cavalry divisions.
6 Includes infantry divisions (motorized).
7 Includes tank and mechanized divisions and self-propelled guns.
For tanks in rifle divisions use table XXXII.

depth will prevent foot marches unless skis or snowshoes are used. For troops equipped with skis or snowshoes and adequately trained in their use, the following rates of march are applicable:

Snowshoes	1½ to 2½ miles per hour
Skis	1½ to 3½ miles per hour

(Small bodies of well-trained troops are capable of moving 40 miles a day on skis under favorable conditions.)

(2) Wheeled motor movements can be made across country, depending on the terrain. However, special measures to permit movement must be adopted.

Snow depth, inches	*Measures required for movement*
3	None
6	Chains on rear wheels
6–18	Chains all-around; special traction grousers on trail-breaking vehicles
18 and over	Snowplow.

(3) Tracked vehicles are not impeded to any appreciable degree by new-fallen snow up to 2 feet in depth. Icing conditions or layers of crusted snow may require the use of tank dozers or snowplows.

c. Forced Marches of Foot Elements. Seasoned troops, when well rested before beginning the march and moving on good roads in good weather, are capable of marching 12 hours per day at an overall (for 24 hours) daily average rate of 1.25 miles per hour, or 30 miles per day for protracted periods.

d. Rules for Calculating Aggressor March Capabilities. Following are rules for calculating Aggressor capabilities:

(1) Starting time and place are time and place unit was last reported.

(2) Select logical point unit must reach to start a particular course of action.

(3) March distance is distance from (1) to (2) above.

(4) Arrival time is starting time plus march time plus closing time. This total time is rounded off to the nearest 5 minutes. In case of a withdrawal, closing time is not computed. In case of a piecemeal action, compute the arrival time of the nearest Aggressor unit that can initiate the action; closing time is not computed.

(5) (*a*) For distances of 20 miles or more, rifle battalions and rifle regiments normally move by motor. For distances less than 20 miles, these units normally move by foot unless specifically provided transportation.

(*b*) For distances more than 40 miles the rifle division will normally move by motor employing attached transportation. For distances less than 40 miles, the entire

rifle division normally will make a motor movement by shuttling with organic vehicles.

(6) Compute foot marching time for reinforcements for all distances when there are no indications that there are sufficient vehicles to motorize the unit. If a unit is observed in trucks, compute only the motor marching time.

(7) Consider motor march of over 175 miles as a forced march for motorized rifle units and over 140 miles as a forced march for tank and mechanized units. This cannot be continued indefinitely but must be adjusted to actual conditions. The rate of march is not changed. See table XXIX for forced march capabilities.

(8) At the beginning of morning nautical twilight (BMNT) if the column is not closing, change the rate of march from night to day. If the column is in the process of closing at BMNT, continue to close the column at the night rate of march.

(9) At the end of the evening nautical twilight (EENT), if the column is not closing, change the rate of march from day to night. If the column is in the process of closing at EENT, continue to close the column at the day rate of march.

(10) To move an Aggressor rifle or mechanized rifle battalion, move and close entire unit.

(11) To move an Aggressor rifle or mechanized rifle regiment, not moving as part of a division movement, move and close two battalions.

(12) To move an Aggressor rifle division, move and close two entire rifle regiments.

(13) To move an Aggressor tank regiment, move and close entire unit.

(14) To move an Aggressor tank or mechanized rifle division:

(*a*) on one road, move and close two-thirds of division's time length.

(*b*) on two or more roads (approximately equal distance), move and close one-third of division's time length.

(15) When a unit is less than full strength, close it as though full strength, irrespective of the amount of the shortage.

(16) Aggressor units are considered ready for coordinated action when the rules listed in (10) through (15) have been complied with.

e. March Tables. The following tables for Aggressor divisions and their major subordinate elements are based on the basic time and space factors shown in the preceding paragraphs (tables XXX, XXXI and XXXII).

Table XXX. Rifle Division March Table

1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
					Road space (mi.)			Time length (min.)								Time length (min.)	
						Vehicles in march column		Men on foot, column of twos				Vehicles in march column				Vehicles of units motorized (see col. 15)	
								Cross-country		Roads							
1	Units	Personnel	Organic motor vehicles (includes trk, motorcycles, AC, tk, and SP guns)	Men on foot	Men on foot (halted or moving) column of twos	Close column 45 veh per mi (15 MPH)[1]	Open column 20 veh per mi (20 MPH)[2]	Night 1 MPH	Day 1½ MPH	Night 2 MPH	Day 2½ MPH	Close column 45 veh per mi (15 MPH)[1 3]	Open column 20 veh per mi (20 MPH)[2 3]	Additional vehicles to carry foot troops [5]	Total vehicles when unit moves by truck	Close column 45 veh per mi (15 MPH)[1 3]	Open column 20 veh per mi (20 MPH)[2 3]
2	Rifle div	13,403	1,820	2,700	4.59	40.5	91.0	275	183	137	110	264	401	108	1,928	307	406
3	Rifle regt (each)	2,663	265	900	1.53	5.9	13.2	75	61	46	37	23	33	36	301	39	51
4	Rifle bn (each)	591	48	300	0.51	1.07	2.4	31	21	15	12	4	7	12	60	7	11
5	Div arty	2,457	382	------	-------	12.3	24	----	----	----	----	43	63	------	382	47	72
6	Arty regt	1,400	220	------	-------	7.2	13.9	----	----	----	----	13	19	------	220	29	42
7	80-mm Gun bn (1) (ea)	240	30	------	-------	.91	1.75	----	----	----	----	2	3	------	30	4	7
8	120-mm How bn (3) (each)	240	30	------	-------	.91	1.75	----	----	----	----	2	3	------	30	4	7
9	150-mm mort bn	240	30	------	-------	.91	1.75	----	----	----	----	2	3	------	30	4	7
10	AA regt	682	99	------	-------	3.0	6.2	----	----	----	----	7	12	------	99	11	18
11	AT bn	220	45	------	-------	1.5	3.9	----	----	----	----	2	3	------	45	5	7
12	Recon bn	364	84	------	-------	2.8	5.2	----	----	----	----	19	27	------	84	10	16
13	Tk regt (Med)[4]	700	188	------	-------	5.7	-------	----	----	----	----	-------	-------	------	188	23	-------
14	Engr bn	530	70	------	-------	2.2	4.5	----	----	----	----	7	10	------	70	9	14
15	Sig bn	300	35	------	-------	1.0	2.1	----	----	----	----	3	4	------	35	4	7
16	Other	1,063	217	------	-------	6.9	13.7	----	----	----	----	24	35	------	217	28	41

[1] Refers to movement at night.
[2] Refers to movement in daylight.
[3] Time intervals within a serial average 1 minute per 25 vehicles (not considered when serial consists of less than 50 vehicles). Time interval between serials is 15 minutes.
[4] Use data in table XXIX for calculations.
[5] 3-ton trucks.

Table XXXI. Mechanized Rifle Division March Table

1	2	3	4	5	6	7	8	9	10	11
Units	Personnel	Organic motor vehicles (including trk, motorcycles, AC, tk, and SP guns)	Road space (mi.)				Time length (min.)			
			Vehicles in march column				Vehicles in march column			
			Close column 60 veh per mi (10 MPH)[1]	Open column 25 veh per mi (15 MPH)[2]	Close column 45 veh per mi (15 MPH)[1]	Close column 20 veh per mi (20 MPH)[2]	Close column 60 veh per mi (10 MPH)[1 3]	Open column 25 veh per mi (15 MPH)[2 3]	Close column 45 veh per mi (15 MPH)[1 3]	Open column 20 veh per mi (20 MPH)[2 3]
1 Mech rifle div	15,200	3,118	51.9	124.7	----------	----------	571	759	----------	----------
2 Mech rifle regt (ea)	2,425	380	6.3	15.2	----------	----------	53	76	----------	----------
3 Mech rifle bn (ea)	480	135	2.2	5.4	3	6.7	19	27	12	20
4 Med tk bn	305	44	0.7	1.7	----------	----------	3	9	----------	----------
5 Med tk regt	1,131	260	4.3	10.3	----------	----------	36	52	----------	----------
6 Med tk bn (ea)	185	44	0.7	1.7	----------	----------	3	9	----------	----------
7 Mech rifle Co	106	9	0.1	0.3	0.2	0.4	1	2	1	1
8 Hv tk regt	953	232	3.8	9.2	----------	----------	32	46	----------	----------
9 120-mm SP Gun bn	170	36	0.6	1.4	----------	----------	5	7	----------	----------
10 Hv tk bn (ea)	170	35	0.6	1.4	----------	----------	5	7	----------	----------
11 Mech rifle Co	106	11	0.2	0.4	0.2	0.4	2	2	1	2
12 Div arty	2,790	459	7.6	18.3	10.2	22.9	64	92	4	69
13 120-mm how bn (ea)	872	30	0.5	1.2	0.7	1.5	4	6	3	5
14 80-mm gun bn	872	30	0.5	1.2	0.7	1.5	4	6	3	5
15 150-mm mort bn	240	30	0.5	1.2	0.7	1.5	4	6	3	5
16 150-mm rkt bn	276	60	1.0	2.5	1.4	3.0	8	12	6	10
17 AA regt	682	99	1.6	3.9	2.2	4.9	14	20	9	15

18 Recon bn	364	84	1.4	3.3	1.9	4.2	12	17	8	13
19 Engr bn	530	70	1.1	2.8	1.5	3.5	10	14	6	11
20 Sig bn	300	35	0.5	1.4	0.8	1.7	5	7	3	5
21 Others	1,892	895	14.9	35.8	19.8	44.7	125	179	80	134

[1] Refers to movement at night.

[2] Refers to movement during daylight.

[3] Time intervals within a serial average 1 minute per 25 vehicles (not considered when serial consists of less than 50 vehicles). Time interval between serials is 15 minutes.

Table XXXII. Tank Division March Table

1		2	3	4		5	
Units		Personnel	Organic motor vehicles (includes trk, motorcycles, AC, tk, and SP guns)	Road space (mi)		Time length (min)	
				Vehicles in march column		Vehicles in march column	
				Close column 60 veh per mi (10 MPH)[1]	Open column 25 veh per mi (15 MPH)[2 3]	Close column 60 veh per mi (10 MPH)[2]	Open column 25 veh per mi (15 MPH)[2 3]
1	Tk div	12,337	3,059	50.1	122.3	548	729
2	Med tk regt (each)	1,131	260	4.3	10.3	36	52
3	Hv tk regt	957	232	3.8	9.2	32	46
4	Mech rifle regt	2,425	380	6.3	15.2	53	76
5	Div arty	2,737	493	8.2	19.7	68.9	97
6	Recon bn	364	84	1.4	3.3	12	17
7	Others	2,785	1,088	18.1	43.5	152	207

[1] Refers to movement at night.

[2] Refers to movement during daylight.

[3] Time intervals within a serial average 1 minute per 25 vehicles (not considered when serial consists of less than 50 vehicles). Time interval between serials is 15 minutes.

Section V. AGGRESSOR ACTIVITIES

384. Attack

Attack indicated by:

Activity	*Explanation*
Massing of rifle elements, armor, artillery, and logistical support.	Areas of secondary importance are often denuded in order to mass maximum strength for main effort.
Deployment of combat elements (rifle, armor, antitank units) in echelon.	Normal attack formation provides for the second echelon of the regiment to be located initially up to 4 miles in rear of the line of contact; division second echelon from about 4 miles in rear of the line of contact; and corps second echelon about 10 to 12 miles in rear of the line of contact.
Forward units disposed on relatively narrow fronts.	Normal frontage of rifle battalion for assault is about 1 mile.
Concentration of mass toward either or both flanks.	Single or double envelopment is normally attempted in the offense. Armored and mechanized units massed on either or both flanks may indicate single or double envelopment.
Extensive artillery preparation.	Offensive built around the striking power and shock of massed artillery. Preparations of ¼ to ½ hour normally precede offensive.
Artillery positions well forward and concentrated.	Artillery positions for the attack are well forward, with direct fire weapons, artillery pieces, and large numbers of mortars concentrated.
Dispersal of tanks and self-propelled guns to forward units.	Tanks accompany leading waves of assault rifle units. Self-propelled guns follow tanks closely by bounds.
Medium antiaircraft guns located in forward areas.	Medium antiaircraft guns displaced forward prior to attack to protect assault forces and to facilitate forward displacement during the attack.
Clearing lanes through obstacles within own position.	Lanes are cleared and marked through mined areas, and ramps and bridges prepared over ditches and trenches within Aggressor's own position. This is done prior to attack to facilitate forward movement and grouping, particularly at night.
Reconnaissance and destruction of obstacles which are part of enemy defenses.	Usually on night preceding attack, Aggressor patrols reconnoiter enemy obstacles to determine plan for clearing lanes. Patrol destroys only such obstacles as will not disclose direction of main effort.
Demonstrations and feints__	Local, small-scale attacks of demonstrations involving rifle units, armor, and artillery frequently precede a general attack.

Activity	*Explanation*
Construction of jumpoff trenches.	Jumpoff trenches are constructed approximately 200 yards from line of contact. Several trenches are normally constructed for assault troops, their supporting weapons, and reserves. The distance between trenches is from 200 to 300 yards.
Conducting drills and rehearsals in rear areas.	Major attacks may be preceded by rehearsals. This is particularly true of attacks against fortified positions or strongly defended river lines.
Establishment and strengthening of counterreconnaissance screen.	Counterreconnaissance screens are used to cover possible assembly areas, routes of troop movement, or regrouping of forces to be used in the attack.
Movement of hostile units forward.	Prior to launching an attack, troops may be moved to assembly areas from which they can deploy.
Location of enemy troops in forward assembly areas.	Troops are assembled in areas from which they can launch the attack.
Increased patrolling.	Patrolling by rifle units is usually more active before an attack.
Increased activity in rear areas.	Before an attack, supply and administrative activities increase in the rear areas.
Location of supply and evacuation installations well forward.	Supply and evacuation installations are usually located well forward for an attack.
Increased air reconnaissance_	Air reconnaissance is usually more active before an attack.
Systematic air bombardment_	Before the attack, Aggressor may engage in systematic "softening up" of enemy position by bombardment.

385. Centralized Position Defense

Centralized position defense indicated by:

Activity	*Explanation*
Formation of antitank strongpoints.	Antitank strongpoints are formed along logical avenues of approach for armor. These are made up of rifle, engineer, and antitank gun units with positions strengthened by mines, ditches, and other obstacles.
Artillery positions in depth and disposed laterally.	In the defense, artillery position areas are in depth from about 3,000 to 8,000 yards behind the forward edge of the main defense zone and are laterally disposed.
Preparation of alternate artillery positions.	In normal defensive operations, three positions are prepared for each firing battery.
Employment of roving artillery.	Roving guns are a part of normal defensive operations.

Activity	*Explanation*
Forward rifle battalions disposed for all-around protection.	Rifle battalion strong points are organized for all-around defense.
Large armored units located well to the rear.	Armored units are held beyond enemy artillery range for employment in counterattack role.
Preparation and occupation of successive defense lines.	In the defense, separate and distinct defense lines each are prepared and occupied.
Presence of demolitions, gassed areas, obstacles, and minefields.	Demolitions, and minefields and other obstacles are placed to cover approaches to the position.
Deployment of rifle units on good defensive terrain.	Dominating terrain having good fields of fire and relatively inaccessible to tanks is usually selected for a defensive position.
Dumping ammunition and engineer supplies and equipment; fortifying buildings.	Engineer tools and equipment may be used to dig trenches and to erect obstacles.
Entrenching and erecting bands of wire.	Digging of trenches and the erection of wire indicate preparations to hold the position.
Location of command posts and supply and evacuation installations to rear.	Command posts and supply and evacuation installations are usually located well to the rear.

386. Defense on Successive Positions

Defense on successive positions indicated by:

Activity	*Explanation*
Unoccupied artillery positions prepared in depth and stocked with ammunition.	Facilitates speedy retrograde displacements and permits relatively large expenditure of ammunition by covering forces.
Long-range artillery located well forward.	Artillery fire is used to force early deployment and disruption of advancing enemy force.
Movement of forward elements to the rear before becoming closely engaged.	Forward units seek to effect maximum deployment and disruption of enemy force without becoming closely engaged.
Measures taken to improve routes and protect communications bottlenecks to the rear.	Measures are taken well in advance of withdrawal of forward units to facilitate and protect rearward movements.
Movements to and occupation by reserves of positions in rear or on flanks of the position.	Troops located in these positions can cover withdrawal of forward elements as well as counterattack pursuing forces.
Surprise infantry and artillery attack from an apparent defensive position.	Sudden, rifle unit and artillery attacks are launched to disrupt the enemy and thereby cover immediate withdrawal to rearward positions.

Activity	*Explanation*
Preparation of extensive demolitions, obstacles minefields, and gassed areas behind or on flanks of present line of contact.	This action will delay pursuing forces when enemy forward units commence movement to rear over previously reconnoitered routes.
Loss of contact over broad front.	Withdrawal is effected to next rearward position by displacing entire units or all units on the forward position simultaneously, usually under cover of darkness, smoke, or heavy artillery concentration.
Enemy disposed on a broad front with little depth.	Early development of maximum firepower for short periods may increase delay. Disposition on a broad front will allow enemy to oppose encircling forces on routes leading to his rear.
Construction of successive lines of defense with from 8,000 to 12,000 yards between lines.	Delaying forces may prepare several positions in depth. The main force occupies the first position and the second echelon occupies the second position.

387. Withdrawal

Indications for withdrawal are the same as those for the defense on successive positions with the addition of the following:

Activity	*Explanation*
Rearward movement of long-range artillery and supply echelons.	In withdrawal, the first units to be withdrawn are long-range artillery and the supply echelons which move back under cover of darkness 1 or 2 days before the main withdrawal.

388. Reinforcement

Reinforcement indicated by:

Activity	*Explanation*
Movement of additional troops toward the front.	This action could increase enemy's present strength.
Increased traffic toward present position.	This increased traffic may bring up additional troops and supplies.
Identification of new units in combat zone.	The presence of new units in addition to units already present will increase enemy's strength.
Additional command posts and supply and evacuation installations.	Presence of additional units could cause an increase in number of these installations.

389. Atomic Warfare

Atomic warfare indicated by:

Activity	*Explanation*
Heavily guarded movement of supplies, equipment, and materiel.	Movement of supplies, equipment, and materiel of nuclear nature requires special security measures.

Activity	*Explanation*
Heavily guarded areas of installations.	Sites for storage of nuclear supplies and the locations of delivery units are heavily guarded.
Presence of special troops or special troop units.	Specialists and special troop units are required to handle nuclear weapons.
Evacuation of and exclusion of civilians from specific areas suitable for nuclear storage or delivery sites.	Civilians may be evacuated from areas selected for nuclear storage or delivery sites.
Increased or unusual air activity.	Delivery of nuclear weapons by air may require a temporary degree of local air superiority, special photo missions, and/or practice flight pattern runs by the delivery aircraft.
Location of missile and/or free rocket units within striking range of enemy areas.	Missile and free rocket units must be located within a certain distance from the frontlines.
Use of missiles and/or free rockets with high explosive warheads.	Missiles or free rockets may be used to deliver high explosive warheads either in a normal support role or a registration.
Preparation of very heavy artillery positions.	Positions, primary and alternate, for nuclear delivery artillery are prepared prior to movement of the units.
Location of very heavy artillery within supporting distance of frontlines.	Nuclear delivery artillery must be located within a certain distance from the frontlines.
Registration of very heavy artillery.	Registration may be required, using smoke, low charge, or high explosive projectile, prior to firing a nuclear projectile.
Special or unusual activity by frontline troops.	Frontline troops may construct special positions, usually deep or covered foxholes, or special shelters defiladed just in rear of frontline positions.
Limited withdrawal of frontline units without apparent tactical reason.	Frontline units may withdraw for a limited distance to avoid casualties from close-in nuclear explosions.
Large concentrations of radio and other electronic equipment located in the vicinity of suitable sites for guided missile launching.	Concentration of equipment is necessary to guide and control the guided missile, and must be located in close proximity of the launching site.
Sudden increase in communications and electronic activity.	Increase may be incident to delivery of nuclear weapons, for example, last-minute orders and warning and use of electronic guidance and control.
Use of smoke cover on frontline troops.	Smoke may be used to protect troops against thermal effects of weapons used in close support.

Activity	*Explanation*
Disappearance of known enemy agents from specific areas.	Prior to nuclear attack of an area, agents may be ordered to leave the area.
Movement of small but heavily guarded convoys.	Small convoys carrying nuclear weapons or delivery means will be heavily guarded.
Sudden and energetic digging in enemy areas.	Prior to use of nuclear weapons, frontline units may be ordered to dig deeper foxholes or take other individual protective measures.
Mechanized divisions well forward in offensive operations.	Mechanized divisions will usually be employed in offensive operations to promptly exploit effects of nuclear fires.
Elements of mechanized army well forward in offense.	In offensives conducted by larger units, the mechanized army is usually committed on the first or second day of offensive.

APPENDIX

REFERENCES

DA Pam 108–1	Index of Army Motion Pictures, Filmstrips, Slides and Phono-Recordings
DA Pam 310–3	Index of Training Publications
DA Pam 310–4	Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders and Modification Work Orders
AR 220–55	Field Exercises and Maneuvers
AR 310–6	Guide for Preparation of DA Training Literature
AR 320–5	Dictionary of United States Army Terms
AR 320–50	Authorized Abbreviations and Brevity Codes
ATP 20–5	Army Training Program for Field Exercises and Maneuvers
Army Subject Schedule 6–30	Umpiring and Aggressor Forces
FM 21–5	Military Training
FM 21–6	Techniques of Military Instruction
FM 21–30	Military Symbols
FM 30–101	The Maneuver Enemy
FM 30–103	Aggressor Order of Battle
FM 30–104	Aggressor Representation
FM 105–5	Maneuver Control

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By Order of *Wilber M. Brucker*, Secretary of the Army:

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For explanation of abbreviations used, see AR 320–50.

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